VAN WATERS & ROGERS INC.

REVISION
PART B

Van Waters & Rogers - Cleveland/Bedford Heights
Bedford Heights, Ohio Facility

EPA I.D. No. OHD071107791

Revised
December 22, 1986

Should you have questions or comments with regard to these revised applications, please feel free to contact Mr. Tom Nisler, VW&R Region Environmental Representative, at (312) 573-4300 in Oak Brook, Illinois; Dr. William Young, of Harding Lawson Associates, Van Waters & Rogers' environmental consultants, at (713) 789-8050 in Houston, Texas; or me.

Your cooperation during the transfer process is greatly appreciated.

Sincerely,

Scott R. Vokey

Scott R. Vokey

SRV:sve
Enclosures: as stated

cc: Tom Nisler, VW&R, Oak Brook, w/enclosures
Dr. William Young, HLA, Houston, w/enclosures
Ohio Desk, U.S. EPA, Region V, RCRA Activities, Waste Management Division, w/enclosures
Cliff Moll, VW&R, Cleveland/Bedford Heights, w/enclosures
Ivan Byers, VW&R, Cincinnati, w/enclosures

6388-310: Cincinnati - Cleveland/Bdfrd. Hts.

SHIDLER McBROOM GATES & LUCAS

ATTORNEYS AT LAW • A PROFESSIONAL SERVICE CORPORATION

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Seattle, Washington 98104
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VIA FEDERAL EXPRESS

RECEIVED JAN 14 1987 U.S. EPA, REGION V

RECEIVED JAN 14 1987 SOLID WASTE BRANCH U.S. EPA REGION V

December 22, 1986

Mr. Thomas E. Crepeau, Director
Ohio Environmental Protection Agency
Division of Solid and Hazardous Waste Management
Box 1049
261 E. Broad Street
Columbus, Ohio 43215

Reference: Transfer of McKesson Chemical Company's RCRA Status to Van Waters & Rogers Inc. for the Cincinnati and Cleveland/ Bedford Heights Facilities:
Cincinnati: OHD002899847; Ohio No: 05-31-0629
Cleveland/Bedford Heights: OHD071107791

Dear Mr. Crepeau:

We are counsel for Van Waters & Rogers Inc., the wholly-owned subsidiary of Seattle-based Univar Corporation, which acquired substantially all of the assets of McKesson Chemical Company (MCC), a division of San Francisco-based McKesson Corporation, on or about October 31, 1986. Your file will also reflect correspondence from our co-counsel, Graham & James of San Francisco.

Records previously filed with your agency include:

1. Amended Part A applications dated October 31, 1986;

2. Amended Forms 8700-12 dated October 31, 1986;

3. Part B applications; as well as

4. Executed Certificates of Insurance to cover closure costs and liability for sudden accidental occurrences.

Pursuant to a request from you, we herewith enclose amended versions of the Part B application and certification filed in the name of Van Waters & Rogers Inc. to conform with the Forms 8700-12, Part A application and financial assurance documentation previously provided. We are also enclosing a highlighted version of the Part B application to facilitate your review and approval.

COPY 2

TABLE OF CONTENTS

Bedford Heights, Ohio
(Ohio)

PREAMBLE

Van Waters & Rogers Inc. (formerly DSW, Inc.), a Washington corporation based at 1600 Norton Building, Seattle, Washington 98104 with its operating headquarters at San Mateo, California, acquired this facility on or about October 31, 1986. At the time of acquisition, DSW, Inc. became a wholly-owned subsidiary of Univar Corporation, a Delaware corporation. DSW, Inc. in turn changed its name to Van Waters & Rogers Inc. (VW&R) and is operating this facility under the name Van Waters & Rogers Inc., which is the wholly-owned chemical distribution subsidiary of Univar Corporation.

The procedures, policies, and personnel in place for McKesson Chemical Company (the prior operator), including the existing arrangement between this facility and McKesson Envirosystems for waste analysis and recycling, will be maintained pending further review by the new owner. No material changes in these aspects of the operations which require prior notification to appropriate agencies shall be made until such notification has been made and/or other appropriate approvals obtained in accordance with all applicable laws, rules, and regulations.

Unless indicated otherwise, employee training conducted prior to October 31, 1986 was conducted by McKesson Chemical Company. VW&R has retained the McKesson Chemical training personnel and will continue to use the McKesson Chemical training program.

This permit application is identical to that originally submitted by McKesson Chemical Company except for facility name and ownership changes. Site personnel lists and closure cost estimates have also been updated.

Prior correspondence by McKesson Chemical Company which is relevant to this revised application, such as contingency plan letters and the most recent closure cost updates, is included in this application. All existing agreements relevant to the Contingency Plan will be maintained. The appropriate agencies are being notified of this change in ownership. Original maps, drawings, etc. are on file with the agency and, since no changes to these documents are necessary, they have not been resubmitted in this application.

Cleveland/Bedford Heights, Ohio
EPA ID No. OHD071107791

Van Waters & Rogers Inc.
Certification
[40 CFR Sec. 122.6(a)(d)]

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

This statement applies to the filing in behalf of VW&R.

Date: December 23, 1986 Signature: J W Bernard

James W. Bernard, President
Van Waters & Rogers Inc.

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-R0175

FORM 1 GENERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER: F O H D 0 7 1 1 0 7 7 9 1 (F/A) D

LABEL ITEMS

I. EPA I.D. NUMBER: 0 H D 0 7 1 1 0 7 7 9 1

III. FACILITY NAME: Van Waters & Rogers - Cleveland/Bdfd. Hgts.

V. FACILITY MAILING ADDRESS: 26601 Richmond Road
Bedford Heights, OH 44146

VI. FACILITY LOCATION: 26601 Richmond Road
Bedford Heights, OH 44146

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		XX	
B. Does or will this facility *(either existing or proposed)* include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		XX	
D. Is this a proposed facility *(other than those described in A or B above)* which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	XX		
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		XX	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		XX	
J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP: VAN WATERS & ROGERS - BEDFORD HEIGHTS

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 MOLL CLIFF MANAGER	216 292 7500

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX: 3 26601 RICHMOND ROAD

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 BEDFORD HEIGHTS	OH	44146

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER: 5 26601 RICHMOND ROAD

B. COUNTY NAME: CAYAHOGA

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE (if known)
6 BEDFORD HEIGHTS	OH	44146	

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST	B. SECOND
5161 Wholesale Chemical Distributor	(specify)
C. THIRD	**D. FOURTH**
(specify)	(specify)

VIII. OPERATOR INFORMATION

A. NAME

VAN WATERS & ROGERS, INC.

B. Is the name listed in Item VIII-A also the owner? ☒ YES ☐ NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)

F = FEDERAL S = STATE P = PRIVATE M = PUBLIC (other than federal or state) O = OTHER (specify)

P (specify)

D. PHONE (area code & no.) A 206 447 5909

E. STREET OR P.O. BOX

1600 NORTON BUILDING

F. CITY OR TOWN SEATTLE

G. STATE WA

H. ZIP CODE 98104

IX. INDIAN LAND

Is the facility located on Indian lands? ☐ YES ☒ NO

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)	D. PSD (Air Emissions from Proposed Sources)
9 N	9 P
B. UIC (Underground Injection of Fluids)	**E. OTHER** (specify)
9 U	9 (specify)
C. RCRA (Hazardous Wastes)	**E. OTHER** (specify)
R	9 (specify)

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property bounderies. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

As a wholesale chemical distributor, Van Waters & Rogers, Inc. distributes various chemical products. As such, we stock an average of 500 packaged chemicals at this location at any one time. The product list will vary from time to time.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED
James W. Bernard, Vice President	Jas W. Bernard	October 31, 1986

COMMENTS FOR OFFICIAL USE ONLY

C!

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER: F O H D 0 7 1 1 0 7 7 9 1 (T/A) 1

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

☐ 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

C 8 — FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)* — YR. | MO. | DAY

☐ 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN — YR. | MO. | DAY

B. REVISED APPLICATION *(Place an "X" below and complete Item I above)*

XX 1. FACILITY HAS INTERIM STATUS

☐ 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES — CODES AND DESIGN CAPACITIES

A. **PROCESS CODE** — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. **PROCESS DESIGN CAPACITY** — For each code entered in column A enter the capacity of the process.

1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided: Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP (T/A) 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S02	600	G		5				
X-2	T03	20	E		6				
1	S01	6,600	G		7				
2		in 55-gallon drums			8				
3					9				
4					10				

Continued from the front.

III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

IV. DESCRIPTION OF HAZARDOUS WASTES

A. EPA HAZARDOUS WASTE NUMBER — Enter the four—digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four—digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non—listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:
   For listed hazardous waste: For each listed hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non—listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non—listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER — Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non—listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. *(enter code)*	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE *(enter code)*	D. PROCESSES 1. PROCESS CODES *(enter)*	D. PROCESSES 2. PROCESS DESCRIPTION *(if a code is not entered in D(1))*
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				included with above

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)														FOR OFFICIAL USE ONLY											
											T/A	C										T/A	C		
W	0	H	D	0	7	1	1	0	7	7	9	1		1	W			D	U	P			2	DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F001	635,000	P	S01	
2	F002	80,000	P	S01	
3	F003	120,000	P	S01	
4					
5	F005	50,000	P	S01	
6					
7					
8					
9					
10					
11					
12					
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21					
22					
23					
24					
25					
26					

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTES *(continued)*

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. *(enter from page 1)*

F: WHD071107791 T/N/C: 6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail)*.

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground—level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail)*.

I. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*
41 24 04 5	081 29 00 1

VIII. FACILITY OWNER

☐ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. *(area code & no.)*
E: Van Waters & Rogers, Inc.	206-447-5909

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
F: 1600 Norton Building	G: Seattle	WA	98104

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
James W. Bernard, Vice President	J W Bernard	October 31, 1986

X. OPERATOR CERTIFICATION

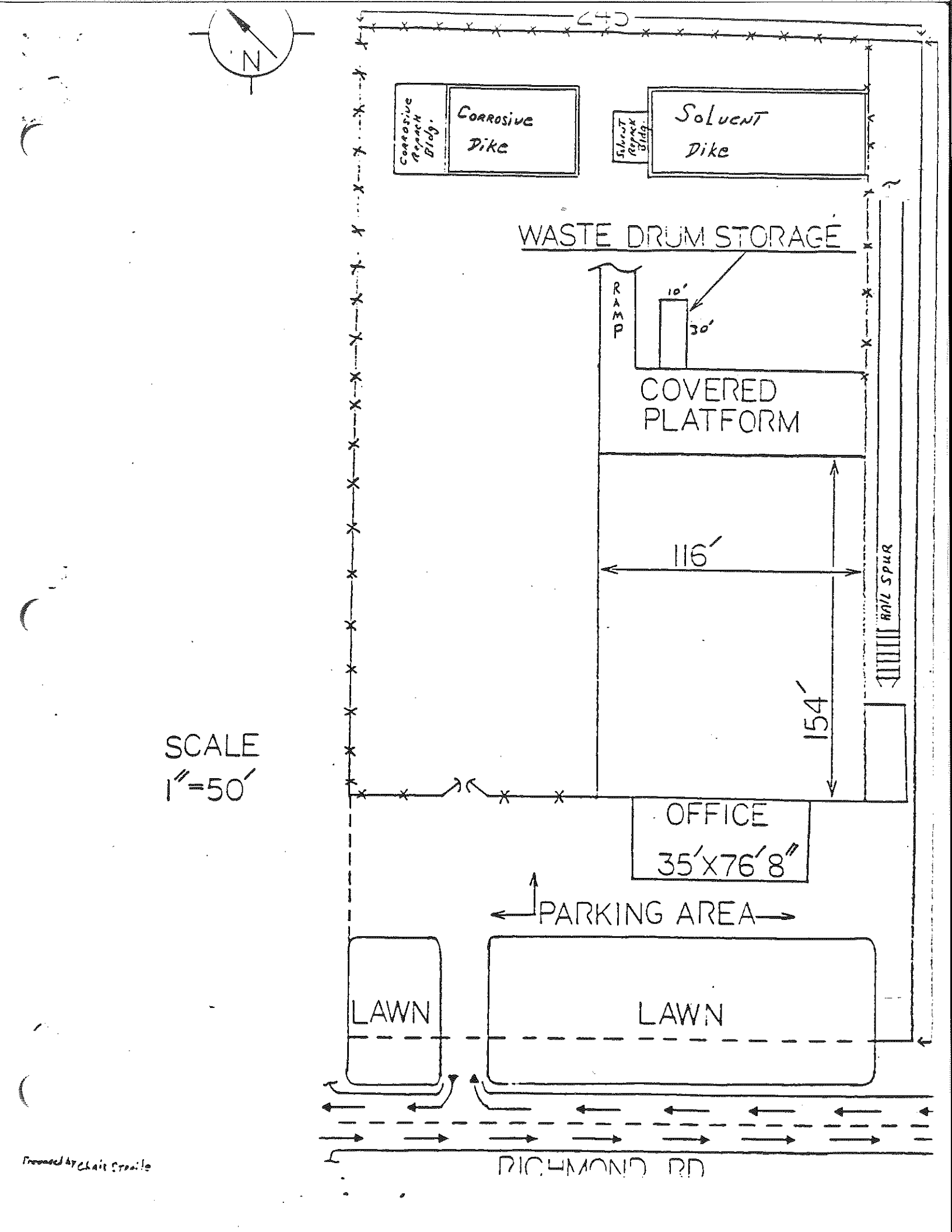
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
James W. Bernard, Vice President	J W Bernard	October 31, 1986

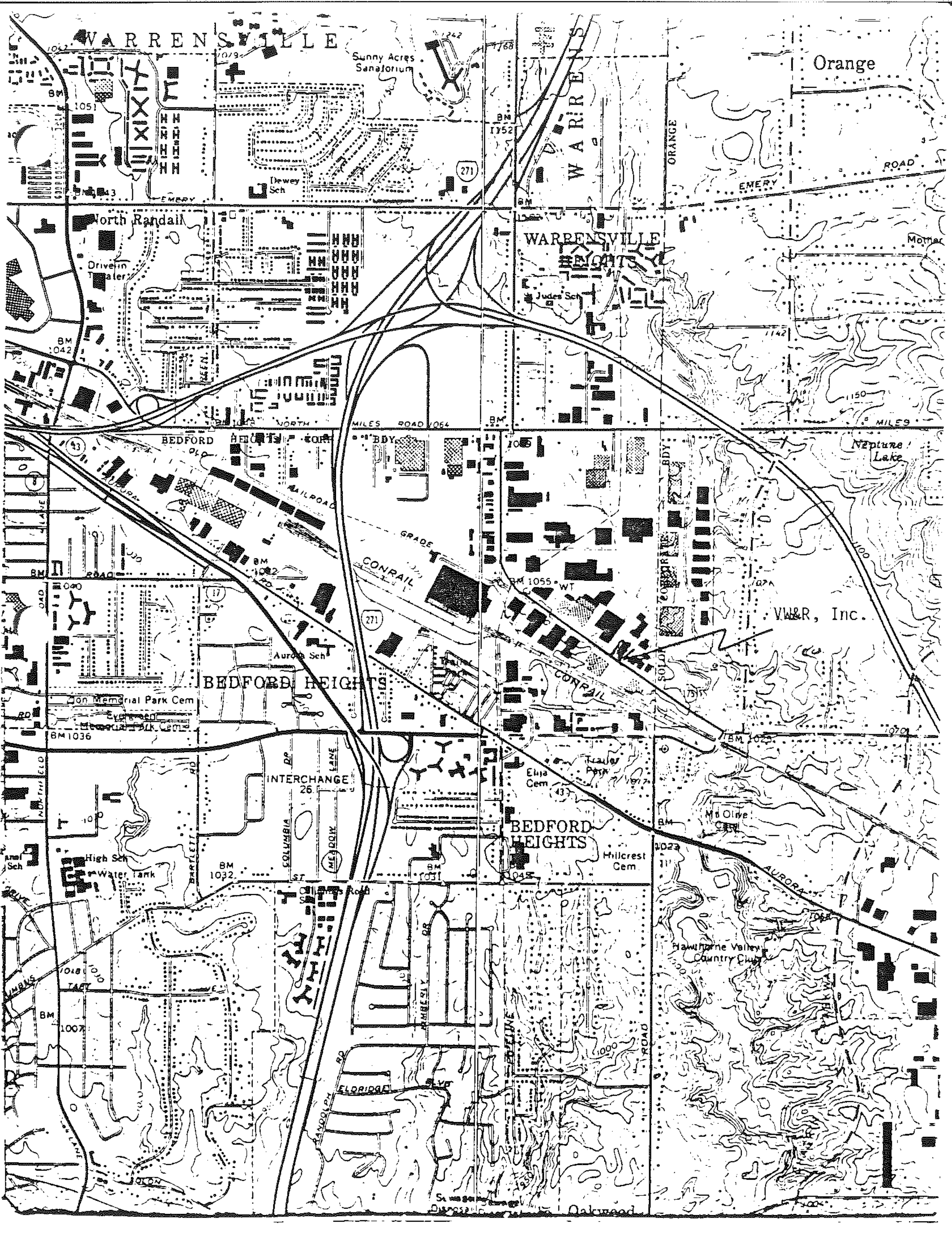
Form Approved OMB No. 158-S80004

V. FACILITY DRAWING *(see page 4)*

Note: SEE ATTACHED SITE PLAN
AND LOCATION MAP.



Prepared by Chait Steele



WARRENSVILLE
Sunny Acres Sanatorium
Orange
EMERY ROAD
Dewey Sch
North Randall
Drive-in Theater
WARRENSVILLE HEIGHTS
Judes Sch
NORTH MILES ROAD 1064
MILES
BEDFORD HEIGHTS CORP BDY
Neptune Lake
RAILROAD
GRADE
CONRAIL
271
VW&R, Inc.
Aurora Sch
BEDFORD HEIGHTS
Zion Memorial Park Cem
Evergreen Memorial Park Cem
BM 1036
INTERCHANGE 26
Elija Cem
Trailer Park
Mt Olive Cem
BEDFORD HEIGHTS
Hillcrest Cem
High Sch
Water Tank
BARTLETT RD
COLUMBIA RD
MEADOW LANE
AURORA
Hawthorne Valley Country Club
TAFT
ELDRIDGE BLVD
RANDOLPH RD
ROAD
Oakwood

Van Waters & Rogers, Inc.

General Description of Facility

(40 CFR Sec. 122.25(a)(1))

Van Waters & Rogers, Inc. (hereafter referred to as VW&R) leases and operates a distributing facility in the City of Bedford Heights, Ohio, located at 26601 Richmond Road. The legal description of its location is as follows:

"Situated in the City of Bedford Heights, County of Cuyahoga and State of Ohio, being a part of Original Lot No. 20 in Bedford Township, bounded and described as follows:

Beginning at a point in the Northerly line of Richmond Road, 50 feet wide, distant 969.61 feet as measured along said Northerly line of Richmond Road from its intersection with the Easterly line of the Village of Bedford Heights, said point being the Southeasterly corner of land conveyed or about to be conveyed to Arrow Sash, Doors & Plywood, Inc.

(1) Thence North 36° 03' 07" East along the Easterly line of land conveyed or about to be conveyed as aforesaid, 450 feet;

(2) Thence South 53° 56' 53" East, parallel to Richmond Road, 245 feet to the West line of lands conveyed by deed from Erie Land and Improvement Company of Pennsylvania to Larry Davis, recorded in Volume 10131, at Page 46 of Cuyahoga County Deed Records;

(3) Thence South 36° 03' 07" West, along said Westerly line of lands conveyed as aforesaid to Larry Davis, 450 feet to said

Revised

Obsolete

Northerly line of Richmond Road;

(4) Thence North 53° 56' 53" West, along said Northerly line of Richmond Road, 245 feet to the point or place of beginning, containing 2.531 acres more or less, but subject to all legal highways."

VW&R is a nationwide distributor of various industrial chemicals. McKesson Envirosystems operates a number of recycling plants across the country and functions as a natural partner to the distribution network which VW&R maintains.

The recycling of spent solvents is but one of the services DSW, Inc. offers to its customers. Many customers who employ our reclaiming services are those who purchased the virgin product from us in the first place. In this manner, VW&R provides a means for our customers to properly manage their wastes and to conserve resources.

The building in Bedford Heights consists of a masonry, steel-framed building of approximately 20,500 square feet. Of this total area, approximately 2,700 square feet is office and the remainer is warehouse storage. The area designated and designed for hazardous waste storage consists of 300 square feet, measuring 10 feet by 30 feet, located in the outside yard area adjacent to the building, accessible from the building for forklift handling of drums from the dock unloading area by means of a concrete ramp. Overall yard area is about 110,000 square

feet, of which approximately 86,000 square feet is fenced in.

This facility will be utilized by VW&R as a temporary storage facility for various chemical solvents destined for recycling. The operation followed is one of picking up a customer's (generator's) spent materials, bringing the material back to the VW&R facility, and placing it into temporary storage until a full truckload of various customer's materials are accumulated, and then reshipping the materials to the recycling center. The containers in which these spent materials are shipped to our facility are of a 55 gallon capacity meeting all DOT specifications for the material being shipped in them. All materials are received, stored, and reshipped in the same container.

The designated storage area for waste materials is to be a bermed rectangle of concrete, 10 feet by 30 feet by 6 inches. The entire outside storage area lying adjacent to the building is surrounded by a 6 foot high chain link fence with the top arms of posts being set at a 45 degree angle from vertical and holding 3 strands of barbed wire extending 1 foot above the top of the chain link fencing.

All movements and handling of materials designated as hazardous wastes at the facility shall be undertaken in accordance with operational plans as outlined in this application. No <u>treatment</u>, <u>processing</u>, or <u>disposal</u> of hazardous wastes will take place at this location.

Experience at other branches handling these types of spent solvent streams indicate the following types of industries are served:

Metalworking: A wide variety of metalworking and machinery manufacture operations require a final degreasing step in order to remove lubricating oil, etc.: lathing, grinding, cutting, stamping. The chlorinated solvents are the work-horses of this business.

Electronic: Circuit boards commonly require a de-oiling step to remove lubricants, solder fluxes, etc. Although the chlorinated solvents are effective, the fluorinated counterparts are generally preferred.

Ink, Adhesives: A wide variety of oxygen — containing solvents are used in cleaning out mixing vats, printing rolls, transfer containers, piping, etc.

Other Industries from which spent solvent streams have been obtained include pharmaceutical, photographic, electrical, textiles, rubber, and plastics.

An engineering drawing of this facility's physical layout, certified by an Ohio — licensed engineer, follows.

This plan, dating from the time of construction of the facility, locates the active drains to the storm sewer. The 18 inch square trench drain between the two tank areas has been paved over. The proposed hazardous waste storage area is located on a high point of the yard. Essentially the entire yard is now paved with concrete, eight inches thick, with enough load-bearing capacity to handle trucks with 80,000 lbs. gross weight.

There are no injection or withdrawal wells on the property. There are no flood controls, run-off controls, or drainage carriers other than the stormwater drainage system and ditches noted on the plot plan. Fire controls (Fire hydrants) are noted on the plan.

Van Waters & Rogers Inc.

Chemical and Physical Analyses

(40 CFR Sec. 122.25(a)(2))

VW&R and McKesson Envirosystems

requires all generators who wish to employ the Company's services to provide data regarding the chemical make-up of the generators' waste stream before pick-up of the material is initiated.

Both the VW&R branch storing spent solvents, and the McKesson Envirosystems facility* which will recycle the material, shall be provided appropriate data from the information furnished by the customer (generator), which will have been reviewed and evaluated by the technically trained people at the Fort Wayne, Indiana, headquarters of McKesson Envirosystems.**

A full description of the procedures and sequence of events pertaining to the accumulation of data and analytical information made available and kept on file at the storage facility before approval to accept materials, is outlined in the Waste Analysis Plan in the next Section. This procedure describes fully the operation followed in developing and disseminating the necessary information to assure that all facilities handling the material have adequate information available to properly manage a given waste stream.

VW&R shall provide to off-site generators wishing to utilize its services any requested proof of appropriate permits to be allowed to handle their particular waste streams. Generators shall also be offered the opportunity to take a tour of any company facility, as well as the actual recycling plants, to allow them an opportunity to assure themselves of compliance of these facilities.

* or another permitted facility

** or another commercial laboratory using US EPA approved testing methods and procedures

R

1986

Van Waters and Rogers, Inc.
26 July 1988

CHAPTER C

WASTE CHARACTERISTICS
WASTE ANALYSIS PLAN

(40 CFR PART 264.13)

C-1 : CHEMICAL and PHYSICAL ANALYSIS

Van Waters and Rogers, Inc. requires potential customers (off-site generators) who wish to employ our services to handle their waste streams to submit to us a Waste Survey Form and a complete laboratory analysis of each of their waste streams to determine the nature and quantity of waste involved. If the laboratory analysis supplied by the off-site generator is inadequate, a sample of the current waste stream will be required. The sample will be sent to a selected permitted treatment/disposal facility for a complete analysis. The completed Waste Survey Form and laboratory analysis are used by Van Waters and Rogers, Inc. and the selected permitted treatment/disposal facility to complete arrangements for transport, storage, and treatment of the waste. Only waste streams that can be properly handled by Van Waters and Rogers, Inc. and the permitted treatment/disposal facility are accepted.

The types of hazardous waste that will be stored at the Branch are listed below:

WASTE DESCRIPTION	WASTE CHARACTERISTICS
Spent halogenated solvents (F001)	Toxic
Spent halogenated solvents (F002)	Toxic
Spent non-halogenated solvents (F003)	Ignitable

Wastes Anticipated To Be Handled in Drums At Fac ity

Van Waters & Rogers Inc.

Chemical	Hazard	Basis For Hazard Designation
Tetrachloroethylene	Toxic	Listed waste F001, F002
Trichloroethylene	Toxic	Listed waste F001, F002
Methylene Chloride	Toxic	Listed waste F001, F002
1,1,1 Trichloroethane	Toxic	Listed waste F001, F002
Carbon Tetrachloride	Toxic	Listed waste F001
Chlorinated Fluorocarbons	Toxic	Listed waste F001, F002
Xylene	Ignitable	Listed waste F003
Acetone	Ignitable	Listed waste F003
Ethyl Acetate	Ignitable	Listed waste F003
Ethyl Ether	Ignitable	Listed waste F003
Methyl Isobutyl Ketone	Ignitable	Listed waste F003
n-Butyl Alcohol	Ignitable	Listed waste F003
Cyclohexanone	Ignitable	Listed waste F003
Methanol	Ignitable	Listed waste F003
Toluene	Toxic, Ignitable	Listed waste F005
Methyl Ethyl Ketone	Toxic, Ignitable	Listed waste F005
Isobutanol	Toxic, Ignitable	Listed waste F005

The above will also be expected in the form of blends with each other, still in drums.

Spent non-halogenated solvents (F005)	Toxic and Ignitable
Non-specific ignitable wastes (D001)	Ignitable
Non-specific corrosive wastes (D002)	Corrosive
Discarded residues (U001 - U239)	mixed characteristics

These are EPA RCRA listed hazardous wastes from non-specific sources exhibiting the hazardous characteristics of toxicity, ignitability, or corrosivity. All of the hazardous wastes to be stored at this facility will be containerized (55 gallon drums) and kept in a hazardous waste management unit with a secondary containment system.

C-2: WASTE ANALYSIS PLAN

This Branch of Van Waters and Rogers, Inc. will function as a temporary storage facility for the short term storage of containers of hazardous waste. The primary source of the waste streams will be customers to whom Van Waters and Rogers, Inc. has previously supplied the same material in its virgin state. Drums of hazardous waste will be accumulated at this facility until enough (60-70 drums) are collected to make shipment to a permitted waste treatment facility economical. Typically a drum of hazardous waste will remain in storage for 60 days or less. The following discussions detail our waste analysis plan.

C-2a : PARAMETERS and RATIONAL

Van Waters and Rogers, Inc. requires a current chemical and physical analysis of off-site generators' waste streams for evaluation prior to our agreeing to haul and store the generator's waste. The sample is to be accompanied by a Waste Survey Form (a typical one is shown in Exhibit C-1). The

information supplied on the Waste Survey Form will be certified by the off-site generator. The form helps to further characterize the chemical and physical nature of the waste stream. The parameters that will be measured and the rationale for their selection are listed below. Examples of typical test results are shown in Exhibit C-2.

The following parameters will be used to determine the exact contents of the containerized wastes, their economic potential when recycled, and the proper method for the safe storage and handling of the various waste streams:

PARAMETER	TEST METHOD	PURPOSE
Assay	Gas Chromatograph	To confirm the identity and amount of recoverable components
Specific gravity	Balance	Useful in product identity. Permits conversion of volume to weight
Water	Karl Fischer	Contamination
Flash Point	ASTM D56 or D93	Ignitability
pH	pH Meter	Corrosivity

Laboratory reports will be available prior to any drums of hazardous waste being received from an off-site generator. Laboratory analyses will be repeated whenever:

1. It is deemed necessary to assure the accuracy of the original analyses and the current status of the waste stream.
2. Whenever the off-site generator's process changes.

3. A manifest discrepancy is detected.

C-2b : TEST METHODS

All analyses required for characterization of a hazardous waste stream will follow the analytical procedures defined in SW-846, "Test Methods for Evaluating Solid Waste". Van Waters and Rogers, Inc. does not operate its own testing laboratories, instead, the company will rely on the analytical capabilities of the permitted treatment facilities utilized for treatment/disposal of hazardous waste. They are fully equipped with laboratory facilities to conduct all testing required by State and Federal regulations.

C-2c : SAMPLING METHODS

The method to be used for taking samples from containers of hazardous waste is contained in "Standard Procedures for Sampling Waste Containers". Van Waters and Rogers, Inc. will not take samples for off-site generators or treatment facilities used to recycle hazardous waste; however, we will require that the methods and equipment used by those obtaining samples for us meet the requirements of Federal and State standards. Van Waters and Rogers, Inc. provides guidance on the safe sampling of waste streams. The guidelines are shown in Exhibit C-3.

C-2d : FREQUENCY of ANALYSIS

Comparison of the analysis performed by the permitted treatment/disposal facility on each shipment of waste with that of the original analysis of the off-site generator's waste will

occur continuously. If a waste stream has not been produced for more than one year since it was originally accepted for storage by Van Waters and Rogers, Inc. and treatment/disposal by a permitted treatment/disposal facility, then a new complete analysis of the waste stream is required. This includes a new waste survey form and a complete laboratory analysis of a sample from the waste stream.

C-2e : ADDITIONAL REQUIREMENTS for WASTES GENERATED OFF-SITE

Pre-approval analysis of all waste streams will be required from all generators, either from their own selected laboratory or through the laboratory facilities of the permitted treatment/disposal facility selected by Van Waters and Rogers, Inc. Each generator doing business with Van Waters and Rogers, Inc. will be required to certify that the waste being offered for handling are only those approved for handling in our permit, and that they do not contain any unacceptable materials. Unacceptable materials include pesticides, carcinogens, radioactive materials, PCB's and poisons. Drums of hazardous waste will be picked-up by Van Waters and Rogers, Inc. and stored at the hazardous waste storage facility only if the information on the hazardous waste label, the information on the manifest, and the information on the initial waste survey form and complete analytical analysis all agree with on another.

Prior to pick-up and storage of a shipment of hazardous waste, Van Waters and Rogers, Inc. requires off-site generators whose waste streams have received prior approval to submit a copy

of the manifest for each waste stream being offered to us for transport and/or storage. The manifest is reviewed for completeness and to make sure that each waste listed is one that has been approved by us for that off-site generator. Each waste listed on the manifest must be one for which we have a complete profile. The DOT shipping name and the EPA hazardous waste code on the manifest must match the names and codes listed on the pre-approval waste survey form and analysis. If they do, Van Waters and Rogers, Inc. will approve pick-up of the waste containers.

Before loading waste containers onto Van Waters and Rogers, Inc. trucks or before waste containers are accepted for storage at our facility if brought by common carrier, each container is checked for proper labeling; waste streams restricted from land disposal must be accompanied by a land disposal restriction statement; container counts must match the counts listed on the manifest; and containers must be in good condition. A copy of the checklist used to verify approved waste pick-ups is shown in Exhibit C-4. Containers of hazardous waste accepted for storage will have the date they entered storage stenciled on the side of the drum.

Each generator will be required to certify that hazardous wastes restricted from land disposal in accordance with 40 CFR Part 268 are labeled accordingly and accompanied by a restricted waste notification statement and/or a certification that the waste meets applicable treatment standards. A sample notification form is shown in Exhibit C-5. Land disposal restrictions require each generator to furnish a Land Disposal

Restriction Notification Statement with each manifest of hazardous waste that is restricted from land disposal. The notification also includes the treatment standards applicable to the restricted waste if land disposal is proposed. In turn, Van Waters and Rogers, Inc. will furnish a Land Disposal Restriction Certification to the permitted treatment/disposal facility.

If Van Waters and Rogers, Inc. receives any waste restricted from land disposal that a generator states meets the treatment standards of 40 CFR Part 268.41 or 268.43, the manifests for these wastes must be accompanied by a certification and test results prepared by the generator that prove the waste constituents in the waste stream do not exceed the values shown in the appropriate table for the waste stream in question. Similarly, any "soft hammer" waste streams received by Van Waters and Rogers, Inc. that are proposed for land disposal must be accompanied by a demonstration that treatment is not practical or available to the generator.

In order to assure that the hazardous wastes will be handled properly during transport and storage, Van Waters and Rogers, Inc. recognizes the need to verify that the wastes we will be accepting are what the off-site generator says they are. Ideally this would involve a complete chemical and physical analysis of each container of waste before it is placed on our trucks for transport away from the off-site generator's facility. Unfortunately, this is not practical. An alternative would be some type of analysis done after the wastes have been transported

to our storage facility. The analysis could be a complete one or an abridged versin consisting of select indicator parameters ("fingerprinting"). The one drawback to sampling is the danger involved in the extra handling of the hazardous waste while obtaining and analyzing samples. Van Waters and Rogers, Inc. does not have extensive laboratory capabilities at its facilities, making sampling and analysis a somewhat risky adventure. It would serve only to increase the possiblity of an accidental release and exposure of hazardous wastes to workers and the environment.

Van Waters and Rogers, Inc. verifies that the containers of waste we will be transporting and storing are what the off-site generator claims they are by comparing the analysis of the off-site generator's initial waste stream with that of the analysis performed by the treatment/disposal facility on each shipment of waste received for treatment. Obviously, this will occur after we have already transported and stored the waste, but this method is safe, accurate, and informative.

A sample of the Waste Verification Form used to determine if the current hazardous waste stream remains acceptable is shown in Exhibit C-6. If a significant discrepancy in the chemical and physical properties between the initial waste stream and the current waste stream is discovered, the off-site generator will be contacted immediately and required to document the reasons for the altered waste stream. Arrangements also will be made to obtain samples for a new complete analysis of the chemical and physical properties of the off-site generator's waste. This

method will maximize safety and minimize the handling of unacceptable wastes. Reports on waste verification will be retained as a part of the Branch operating record along with the Waste Survey Form, the initial laboratory analysis, the most recent laboratory analysis, and other documents.

C-2f : ADDITIONAL REQUIREMENTS for IGNITABLE, REACTIVE or INCOMPATIBLE WASTES

This facility stores toxic, corrosive and ignitable wastes in its hazardous waste storage area. These wastes are not stored near ignition sources or heat producing sources, and "no smoking" signs are conspicuously placed around the area. Van Waters and Rogers, Inc. does not repack (unless a drum fails during storage) or consolidate containers of waste. Incompatible wastes such as reactives and corrosives, or ignitables and corrosives will be separated during storage by a berm and by inert materials. This significantly reduces the possibility of exposing ignitable wastes to ignition sources and promoting reactions between incompatible wastes.

Exhibit C-1

Van Waters & Rogers Inc.
subsidiary of Univar

OFFICE USE ONLY

SPENT MATERIALS/WASTE PRODUCTS SURVEY

A COMPANY | EPA ID No. (Federal) | ID No. (State) | SIC No.

BILLING ADDRESS STREET ☐ MANIFEST ADDRESS | PLANT ADDRESS STREET ☐ MANIFEST ADDRESS

CITY | STATE | ZIP | CITY | STATE | ZIP

B PRIMARY WASTE CONSTITUENTS | MIN | MAX | TYPICAL | DESCRIPTION OF WASTE

Water

Nonvolatiles

Manifest To: ☐ VWR

C VOLUME (gallons) | Storage Capacity (gal.)

Frequency: ☐ Month ☐ Week ☐ Year ☐ 90 Days ☐ One time

Packing: ☐ Drums ☐ Bulk

Shipping: ☐ Drums ☐ Bulk

D ☐ P.O. for qualification analysis #_____

E Please send a DOT exempt hazardous material shipping kit for my sample submittal. (check one) ☐ No, I will use my own shipping containers. ☐ Yes P.O. #_____

F The sample I am/will submit to be taken in compliance with EPA SW-846 guidelines. (check one) ☐ Yes ☐ No

G Attach material safety data sheets for raw materials entering the waste which require employee hazard communication under 29CFR 1910.1200.

H Check the following substances which may be in the waste stream (Check one or more). If present, list concentrations or ranges. Use a separate sheet if necessary.

____ dioxins	____ mercury	____ dibenzofurans	____ ethyl chloroacetate
____ benzene	____ PCB	____ dimethyl amine	____ ethyl chloroformate
____ phenol	____ anisidine	____ methyl acrylate	____ hydroquinone
____ phosgene	____ acrylic acid	____ dimethyl sulfate	____ acrylonitrile
____ acetone	____ monochloroacetic acid	____ carbon disulfide	____ chloropicrin
____ pesticides	____ a-naphthylamine	____ methyl vinyl ketone	____ allyl bromide
____ pyridine	____ methylchloroformate	____ dichloroethylether	____ allyl chloride
____ bromoform	____ 1,1-dimethylhydrazine	____ tetraethyl lead	____ diazomethane
____ cresol	____ radioactive materials	____ ethylene diamine	____ acetonitrile
____ furfural	____ 2,4-dinitrotoluene	____ dimethyl formamide	____ methylhydrazine
____ acrolein	____ toluene diisocyanate	____ methyl isocyanate	____ benzoquinone
____ peroxides	____ propylene glycol dinitrate	____ arsenic	____ allyl alcohol
____ aniline	____ hexachloronaphthalene	____ epichlorohydrin	____ ionic salts
____ naphthalene	____ ethylene glycol dinitrate	____ ethylene dibromide	____ cyanates
____ PBB	____ hexachlorocyclopentadiene	____ acetone cyanohydrin	____ formaldehyde

____ None of the above are in the waste stream.

I Does the waste contain any OSHA carcinogen at or above the exclusion level? See 29 CFR Part 1910.1001 through 1910.1018. (Check one) Yes ____ No ____

J Ref. CFR 40 261

EPA HAZARDOUS WASTE DESCRIPTION

EPA Hazard Code(s) (check one or more)
☐ T (toxic)
☐ I (ignitable)
☐ R (reactive)
☐ C (corrosive)
☐ E (EP toxic)
☐ H (acute hazard)

EPA Hazardous Waste Number(s) (check one or more)

☐ D001	☐ _____
☐ F001	☐ _____
☐ F002	☐ _____
☐ F003	☐ _____
☐ F005	☐ _____

☐ Not an EPA Hazardous Waste

K Ref. CFR 49 172.101

DOT HAZARDOUS MATERIAL DESCRIPTION

DOT UN/NA # (check one)
☐ UN 2831
☐ UN 1993
☐ UN 1593
☐ NA 9189
☐ UN 1090
☐ NA 1993
☐ UN 1710
☐ _____

DOT Hazard Class (check one)
☐ Combustible liquid
☐ Flammable liquid
☐ ORM-A ☐ ORM-E
☐ _____

DOT Shipping Name (Check one)
☐ Waste 1,1,1 Trichloroethane
☐ Waste Flammable Liquid, NOS
☐ Waste Methylene Chloride
☐ Hazardous Waste Liquid, NOS
☐ Waste Acetone
☐ Waste Combustible Liquid, NOS
☐ Waste Trichloroethylene
☐ _____
☐ Not a DOT hazardous material

L To the best of my knowledge, this is an accurate description of this material.

Name (Type or print) | Title

Signature | Date | Phone Number (include area code)

Salesperson (print or type) | ☐ Qualification ☐ Shipping Kit | Service Center No.

Exhibit C-2

safety-kleen

80764 - R2304
FUELS
CONTROL #: 019520

PRE/SHIP ANALYSIS - COMPLETE
CUSTOMER SURVEY CUSTOMER COPY
* * E N V I R O S Y S T E M S * *

RUN DATE 07/08/88
SAMPLE #: 024153

KIMBALL ELECTRONICS
1038 E. 15TH ST.

JASPER IN 47546

FEDERAL EPA ID: IND094205614 COUNTY: DUBOIS NATURE OF BUSINESS: PRINTED CIRCUIT BOARDS
STATE EPA: IL.: MO. ID: . ID: SIC #:
MANIFEST ADDRESS IS FACILITY MANIFEST TO SAFETY-KLEEN

MATERIAL DESCRIPTION:
SILK SCREEN SOLVENT CLEANER
PROCESS DESCRIPTION:
SCREEN WASH

VOLUME : 55 GALS PER MONTH
VOLUME ON HAND : 55
STORAGE CAPACITY : 200 IN DRUMS
SHIPPING FREQUENCY: 30 DAYS IN DRUMS
COLOR : GREEN
LAYERS : ONE
PHYSICAL STATE: LIQUID
VISCOSITY : LOW

MATERIAL COMPOSITION (VOL%):	MIN	MAX	TYPICAL
AROMATIC HYDROCARBONS		100.0	70.0
XYLENES		100.0	25.0
WATER		10.0	5.0
NON-VOLATILE MATERIAL			
SETTLED SOLIDS			

RESTRICTED SUBSTANCES: NONE

D.O.T HAZARDOUS MATERIAL DESCRIPTION:
PROPER SHIPPING NAME:
WASTE FLAMMABLE LIQUID

HAZARD CLASS: FLAMMABLE LIQUID HAZARD NO. : NA1142

EPA HAZARDOUS WASTE DESCRIPTION:
NO(S): F005
CODES: IGNITABLE

P.O. NO: AVGANIC CONVRSN TYPE OF SAMPLE: GRAB #DRUMS: TAKEN BY: CUSTOMER
CONTACT: LARRY POWELL TITLE: FOREMAN PHONE: 812/634-4200
COMMENT: VWR INDIANAPOLIS
SALESPERSON: VAN WATERS TERRITORY: 5555 DATE: 06/08/88

ANALYST: WLC REVIEWER: WLC ANALYZED: 06/30/88

CORPORATE REVIEWS:	DISPOSITION	REVIEWER	DATE
TECHNICAL:	ACCEPT	JWH	07/08/88
REGULATORY:	ACCEPT	JWH	07/08/88
OPERATING:	ACCEPT	LWG	07/08/88

APPROVED FACILITIES	AUTH#
658 SK NEWCASTLE, KY	

SK D.O.T. #: 0001002 DRUMS OR BULK
RQ WASTE FLAMMABLE LIQUID N.O.S.
FLAMMABLE LIQUID UN1993
(EPA F003) 1002

COMMENT: OK FOR CLASS A FUEL. SURVEY EPA DESCRIPTION INCORRECT.. PRICING CODE: FA

THIS SERVES AS NOTICE PER, 40CFR264.12(B), THAT THE FACILITY(IES) NOTED ABOVE HAS THE APPROPRIATE PERMITS AND IS WILLING TO RECEIVE THE MATERIAL DESCRIBED.

80764 - R2304

SAFETY-KLEEN CORP
PRE/SHIP ANALYSIS - COMPLETE
MATERIAL ANALYSIS
* * E N V I R O S Y S T E M S * *

RUN DATE 07/08/88

CUSTOMER COPY

FUELS
KIMBALL ELECTRONICS

CONTROL #: 019520
SAMPLE #: 024153

GENERAL COMPOSITION (VOL%): BY APPEARANCE
AQUEOUS PHASE: 0.0 %
ORGANIC PHASE: 100.0 %
BOTTOM SLUDGE: 0.0 %
BOTTOM SOLID : 0.0 %

GENERAL ANALYSIS: TOTAL SAMPLE
COLOR : GREEN
WATER CONTENT: 0.3 WT%
NON-VOLATILE : 6.1 WT%
PH: EXTRACT BY PAPER 7.0
VISCOSITY : <50 CPS

SPECIFIC GRAVITY AT 72 F 0.896
API GRAVITY : 0.0
FLAMMABILITY : FLASHED AT 100 F BY SETAFLASH
RADIOACTIVITY: N.D.
PCB : N.D. < PPM

RECOVERY EVALUATION (VOL%): TOTAL SAMPLE
BOTTOMS OIL : 0.0 %
BOTTOMS NON OIL: 20.0 %
WATER EMULSION : 0.0 %
DISTILLATE : 80.0 %

BOTTOMS VISCOSITY :
BOTTOMS DESCRIPTION: OIL/DEPOSIT
ESTIMATED RECOVERY : 0.0 VOL%

DISTILLATE ANALYSIS:
PH: BY 0.0
ODOR :
ACID ACCEPT: WT%

FUEL EVALUATION (WT%): TOTAL SAMPLE

HEAT CONTENT:	17100 BTU/LB	BROMINE:	0.0 %
HALOGENS:	0.0 %	FLUORINE:	0.0 %
ASH:	5.4 %	SULFUR:	0.0 %
CHLORINE:	0.1 %	PHOSPHORUS:	0.0 %

VOLATILE ORGANIC COMPOSITION: TOTAL SAMPLE BY FID UNITS: WEIGHT %

XYLENES	98.4	TOLUENE	0.3
LOW-BOILING ALIPHATIC HYDROCARBONS	0.3	MINERAL SPIRITS	0.3
LIMONENE, D-	0.3	AROMATIC HYDROCARBONS	0.2
BUTYROLACTONE, GAMMA-	0.2		

SUMMARY:

ALCOHOLS	0.0	KETONES	0.0	CHLORINATED SOLVENTS	0.0
ESTERS	0.0	ALIPHATIC HYDROCARBONS	0.6	AROMATIC HYDROCARBONS	98.9
INHIBITORS	0.0	OTHERS	0.5	MISCELLANEOUS	0.0

ADDITIONAL ANALYTICAL INFO: LOW CHLORIDE FUEL

Exhibit C-3

GUIDELINES FOR SAFE SAMPLING OF DRUMS

Compare component concentrations on Waste Survey Form against the approved list and the banned list of the selected permitted TSDF. Only sample when:

- The component(s) is within maximum range and not on the banned list.
- The pH is >2.0 or <12.0.
- Any component is >3 times the maximum level (Safety-Kleen).
- Two or more components meet the mixture rule (Safety-Kleen).
- The concentrations are less than the maximum concentrations for specific components (Rollins).

Submit estimated composition of any questionable wastes to proper TSDF's technical services for safety and health screening prior to sampling.

On meeting above conditions, the generator can pull the sample:

1. Obtain ChemCare (TM) sample shipping package.
2. If pulling a liquid sample from a container, use COLIWASA sampler.
3. Avoid sampling in confined areas or where odors persist.
4. Get additional ventilation when needed.
5. Make sure sampling device and sample jar are clean; remove drum bungs.
6. Wear disposable gloves compatible with the sample material and insert sampling device slowly with moderate force to bottom of pumpable liquid.
7. Repeat Item 6 above to fill pint bottle and obtain representative sample of available drums.
8. Reinsert drum bungs immediately after sampling.
9. Promptly flush with water any part of your body that comes in contact with waste.
10. Promptly remove any clothing contaminated with waste.

11. Leave a minimum 1" airspace in top of bottle.

12. Clean sampling device for storage or disposal.

13. Complete sample labeling and insert sample jar and original waste survey form into ChemCare (TM) Sample Shipping Pack.

14. Ship sample and survey form directly to the selected permitted TSDF or other analytical lab.

Exhibit C-4

HAZARDOUS WASTE CHECKL T

Generator Name_____ Manifest Number_____
Date_____

BEFORE YOU GO

_____ Make sure you have the xerox copy of the Hazardous Waste Manifest

_____ Take along extra copies of the Land Use Restriction Notification form

_____ Take along a ChemCare agreement if this customer is on the program

AT THE GENERATOR

On the Manifest

_____]. U.S. EPA ID# and manifest document number

_____ 2. Page 1 of __

_____ 3. Generator information

_____ 4. Phone

_____ 5. Transporter

_____ 6. Transporter ID#

_____ D. Phone

_____ 9. Facility name

_____ 10. Facility ID#

_____ H. Phone

_____ 11, 12, 13, 14, I All must be filled out

_____ J or 15. If this is going to WR&R the Sample ID# must be on the manifest and each item must be marked either for recycle or disposal

_____ 16. Name - Signature - Date

Restricted Waste Notification Statement

_____ Generator information

_____ EPA ID#

_____ Manifest number and date

____ Items 1 and 3 filled out

_____ Back side of statement marked with the type of waste

Look at the Drums

_____ 1. Must be 17E drums

_____ 2. Must be clean and in good condition (no creases - minimum rust)

_____ 3. Check that bungs are tight and no leaks showing

_____ 4. No open top drums

_____ 5. No drums with side bungs

_____ 6. No cross contamination of drums (freons in flammable drums)

Hazardous Waste Labels

_____ A. Must be on every drum

_____ B. Must be printed or typed

_____ Proper DOT shipping name of the product
WASTE ____ _____ _____

_____ Generator name and address

_____ EPA ID#

_____ Manifest Document Number

_____ UN or NA number for the product

_____ Accumulation start date

_____ EPA Waste Number (F_ _ _ or D_ _ _)

_____ C. Appropriate DOT labels (flammable diamond)

_____ D. All other labels removed or obliterated

Any drums manifested to Waste Research and Reclamation must have the sample ID# stenciled clearly on the top of the drum.

If all of the above items are not completed then you CANNOT pick up the drums. Get on the phone and call the Branch, the Area, or the Region.

Exhibit C-5

NOTIFICATION OF WASTE SUBJECT TO LAND DISPOSAL RESTRICTIONS

Generator Name: _____ EPA ID# _____
Address: _____ City: _____
State _____ Zip: _____
EPA Hazardous Waste Number: _____
Sample Reference Number: _____
Manifest Number Associated With Waste Shipment: _____

Pursuant to 40 CFR 268.7(a) and 40 CFR 268.7(b), I hereby notify _____ that this waste shipment contains a waste(s) that is (are) restricted under the land disposal restrictions contained in either 40 CFR 268 or RCRA Section 3004(d). This shipment contains one or more of the following wastes (circle one) which are subject to the listed treatment requirements:

	WASTE *(circle one)*	**TREATMENT STANDARD**
A)	Liquid hazardous wastes having a pH less than or equal to two (2).	Neutralization, and/or Solidification
B)	Liquid hazardous waste including free liquids associated with any solid or sludge containing free cyanides at concentrations greater than or equal to 1000 mg/l	Cyanide Destruction Solidification
C)	Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing the following metals (or elements) at concentrations greater than or equal to those specified below: *(circle those that apply)* (i) Arsenic and/or compounds (as As) 500 mg/l; (ii) Cadmium and/or compounds (as Cd) 100 mg/l; (iii) Chromium (VI) and/or compounds as Cr (VI) 500 mg/l; (iv) Lead and/or compounds (as Pb) 500 mg/l; (v) Mercury and/or compounds (as Hg) 20 mg/l; (vi) Nickel and/or compounds (as Ni) 134 mg/l; (vii) Selenium and/or compounds (as Se) 100 mg/l; and (viii) Thallium and/or compounds (as T1) 130 mg/l.	Metals Recovery Solidification
D)	Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm	Incineration, high efficiency boiler, other thermal treatment
E)	The hazardous wastes identified in 40 CFR 261.31 as waste codes F001, F002, F003, F004, F005, F006, F020, F021, F022 F023, F026, F027, F028, K001, K004, K008, K012, K015, K016 K018, K020, K021, K022, K024, K025, K030, K036, K037, K044, K045, K046, K047, K048, K049, K050, K051, K052, K060, K061, K062, K069, K073, K086, K099, K100, K101, K102, or K106.	Circle all applicable constituents or attached Tables CCW and CCWE found in the waste
F)	Wastewaters containing between 1000 mg/l and 10,000 mg/l of total halogenated organic compounds (HOC) found in Appendix III of 40 CFR 268.	Incineration, Carbon Absorption, Steam Stripping, Solvent Extraction, Other
G)	The discarded commercial chemical product wastes specified in 40 CFR 261.33(e) as Waste Codes: P001, 4, 5, 10, 11, 12, 15, 16, 18, 20, 30, 36, 37, 39, 41, 48, 50, 58, 59, 68, 69, 70, 71, 81, 82, 84, 87, 89, 92, 94, 97, 102, 105, 108, 110, 115, 120, 122, or 123.	No land disposal allowed unless the generator provides EPA Regional Administrator with "Soft Hammer" certification as to no practible alternative to land disposal.
H)	The discarded commercial chemical products specified in 40 CFR 261.33(f) as Waste Codes: U007, 9, 10, 12, 16, 18, 19, 22, 29, 31, 36, 37, 41, 43, 44, 46, 50, 51, 53, 61, 63, 64, 66, 67, 74, 77, 78, 86, 89, 103, 105, 108, 115, 122, 124, 129, 130, 133, 134, 137, 151, 154, 155, 158, 159, 171, 177, 180, 185, 188, 192, 200, 209, 210, 211, 219, 220, 221, 223, 226, 227, 228, 237, 238, 248 or 249.	No land disposal allowed unless the generator provides EPA Regional Administrator with "Soft Hammer" certification as to no practible alternative to land disposal.

I)	The hazardous wastes identified by EPA in 40 CFR 261.31 as Waste Codes F007, F008, F009, F019, K011, K013, K014, K017, K031, K035, K084, K085.	No land disposal allowed unless the generator provides EPA Regional Administrator with "Soft Hammer" certification as to no practible alternative to land disposal.

J) Deadline Extensions — Certain LDR restricted wastes are permitted to be placed in a land disposal unit after the deadline provided they meet the right condition. Restricted wastes which qualify for a deadline extension are as follows:

1) *November 8, 1988* for the following wastes:
   - i) F-solvents from small quantity generators,
   - ii) all F-solvents from CERCLA or RCRA corrective actions,
   - iii) 1% F-solvent mixtures,
   - iv) the treatment residues from i, ii, iii above,
   - v) F-dioxin wastes,
   - vi) non-wastewater liquid HOC >1000 mg/l
   - viii) HOC >1000 mg/l which is non-liquid, which is not contaminated soil or debris, and which is not from a CERCLA site or RCRA corrective action.

2) *July 8, 1989* for the following wastes:
   - i) all liquid and non-liquid HOC waste not previously banned except contaminated soil or debris from a CERCLA response or RCRA corrective action.

3) *May 8, 1990* for the following wastes:
   - i) all First-third waste for which treatment standards have not been set (i.e., soft-hammer wastes).

4) *August 8, 1990* for the following wastes:
   - i) K048, K049, K050, K051, K052, K061, [15% zinc], K071,
   - ii) First-Third wastes which are contaminated soil and debris, and have treatment standards based on incineration.

5) *November 8, 1990* for the following wastes:
   - i) F-solvents, F-dioxins, and HOC which is contaminated soil.

The most recent copy of waste analysis or a description of the knowledge upon which this notification is based is attached.

I hereby certify that all information submitted in this and all associated documents is complete and accurate to the best of my knowledge and information.

Signature Title Date

Telephone Number

Table CCWE
Constituent Concentration in Waste Extract
40 CFR 268.41(a)

F001-F005 spent solvents	Concentration (in mg/l)	
	Wastewaters containing spent solvents	All other spent solvent wastes
Acetone	0.05	0.59
n-Butyl alcohol	5.0	5.0
Carbon disulfide	1.05	4.81
Carbon tetrachloride	.05	.96
Chlorobenzene	.15	.05
Cresols (and cresylic acid)	2.82	.75
Cyclohexanone	.125	.75
1,2-Dichlorobenzene	.65	.125
Ethyl acetate	.05	.75
Ethylbenzene	.05	.053
Ethyl ether	.05	.75
Isobutanol	5.0	5.0
Methanol	.25	.75
Methylene chloride	.20	.96
Methylene chloride (from the pharmaceutical industry)	12.7	.96
Methyl ethyl ketone	0.05	0.75
Methyl isobutyl ketone	0.05	0.33
Nitrobenzene	0.66	0.125
Pyridine	1.12	0.33
Tetrachloroethylene	0.079	0.05
Toluene	1.12	0.33
1,1,2-Trichloro - 1,2,2-Trifluoroethane	1.05	0.96
1,1,1-Trichloroethane	1.05	0.41
Trichloroethylene	0.062	0.091
Trichlorofluoromethane	0.05	0.96
Xylene	0.05	0.15

F006 nonwastewaters (see also Table CCW in §268.43)	Concentration (in mg/l)
Cadmium	0.066
Chromium (Total)	5.2
Lead	0.51
Nickel	0.32
Silver	0.072
Cyanides (Total)	Reserved

[1]Reserved.

F020-F023 and F026-F028 dioxin containing wastes	Concentration (in mg/l)
HxCDD- All Hexachlorodibenzo-p-dioxins	1 ppb
HxCDF- All Hexachlorodibenzofurans	1 ppb
PeCDD- All Pentachlorodibenzo-p-dioxins	1 ppb
PeCDF- All Pentachlorodibenzofurans	1 ppb
TCDD- All Tetrachlorodibenzo-p-dioxins	1 ppb
TCDF- All Tetrachlorodibenzofurans	1 ppb
2,4,5-Trichlorophenol	0.05 ppm
2,4,6-Tetrachlorophenol	0.05 ppm
2,3,4,6-Tetrachlorophenol	0.10 ppm
Pentachlorophenol	0.01 ppm

K001 nonwastewaters (see also Table CCW in §268.43)	Concentration (in mg/l)
Lead	0.51

K022 nonwastewaters (see also Table CCW in §268.43)	Concentration (in mg/l)
Chromium (Total)	5.2
Nickel	0.32

K046 nonwastewaters (Nonreactive Subcategory)	Concentration (in mg/l)
Lead	0.18

K048, K049, K050, K051 and K052 nonwastewaters (see also Table CCW in §268.43)	Concentration (in mg/l)
Arsenic	0.004
Chromium (Total)	1.7
Nickel	0.048
Selenium	0.025

K061 nonwastewaters (Low Zinc Subcategory - less than 15% total zinc)	Concentration (in mg/l)
Cadmium	0.14
Chromium (Total)	5.2
Lead	0.24
Nickel	0.32

K061 nonwastewaters (High Zinc Subcategory - 15% or greater total zinc) Effective until 8/8/90	Concentration (in mg/l)
Cadmium	0.14
Chromium (Total)	5.2
Lead	0.24
Nickel	0.32

K062 nonwastewaters	Concentration (in mg/l)
Chromium (Total)	0.094
Lead	0.37

K071 nonwastewaters	Concentration (in mg/l)
Mercury	0.025

K086 nonwastewaters (Solvent Washes Subcategory) (see also Table CCW in §268.43)	Concentration (in mg/l)
Chromium (Total)	0.094
Lead	0.37

F087 nonwastewaters (see also Table CCW in §268.43)	Concentration (in mg/l)
Lead	0.51

K101 and K102 nonwastewaters (Low Arsenic Subcategory - less than 1% Total Arsenic (see also Table CCW in §268.43)	Concentration (in mg/l)
Cadmium	0.066
Chromium (Total)	5.2
Lead	0.51
Nickel	0.32

NOTE: "Wastewater" means a waste containing less than 1% filterable solids and less than 1% T.O.C.

Table CCW
Constituent Concentration in Wastes
40 CFR 268.43

F001, F002, F003, F004 and F005 wastewaters (Pharmaceutical Industry)	Concentration (in mg/l)
Methylene Chloride	.044

F006 nonwastewaters (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Cyanides (Total)	Reserved.

K001 nonwastewaters (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Naphthalene	8.0
Pentachlorophenol	37.
Phenanthrene	8.0
Pyrene	7.3
Toluene	0.14
Xylenes	0.16

K001 wastewaters	Concentration (in mg/l)
Naphthalene	0.15
Pentachlorophenol	0.88
Phenanthrene	0.15
Pyrene	0.14
Toluene	0.14
Xylenes	0.16
Lead	0.037

K015 wastewaters	Concentration (in mg/l)
Anthracene	1.0
Benzal chloride	0.28
Benzo (b and/or k) fluoranthene	0.29
Phenanthrene	0.27
Toluene	0.15
Chromium (total)	0.32
Nickel	0.44

K016 nonwastewaters	Concentration (in mg/kg)
Hexachlorobenzene	28.
Hexachlorobutadiene	5.6
Hexachlorocyclopentadiene	5.6
Hexachloroethane	28.
Tetrachloroethene	6.0

K016 wastewaters	Concentration (in mg/l)
Hexachlorobenzene	0.033
Hexachlorobutadiene	0.007
Hexachlorocyclopentadiene	0.007
Hexachloroethane	0.033
Tetrachloroethene	0.007

K018 nonwastewaters	Concentration (in mg/kg)
Chloroethane	6.0
1,1-Dichloroethane	6.0
1,2-Dichloroethane	6.0
Hexachlorobenzene	28.
Hexachlorobutadiene	5.6
Hexachloroethane	28.
Pentachloroethane	5.6
1,1,1-Trichloroethane	6.0

K018 wastewaters	Concentration (in mg/l)
Chloroethane	0.007
Chloromethane	0.007
1,1-Dichloroethane	0.007
1,2-Dichloroethane	0.007
Hexachlorobenzene	0.033
Hexachlorobutadiene	0.007
Pentachloroethane	0.007
1,1,1-Trichloroethane	0.007

K019 nonwastewaters	Concentration (in mg/kg)
Bis (2-chloroethyl) ether	5.6
Chlorobenzene	6.0
Chloroform	6.0
1,2-Dichloroethane	6.0
Hexachloroethane	28.
Naphthalene	5.6
Phenanthrene	5.6
Tetrachloroethene	6.0
1,2,4-Trichlorobenzene	19.
1,1,1-Trichloroethane	6.0

K019 wastewaters	Concentration (in mg/l)
Bis (2-chloroethyl) ether	0.007
Chlorobenzene	0.006
Chloroform	0.007
p-Dichlorobenzene	0.008
1,2-Dichloroethane	0.007
Fluorene	0.007
Hexachloroethane	0.033
Naphthalene	0.007
Phenanthrene	0.007
1,2,4,5-Tetrachlorobenzene	0.017
Tetrachloroethene	0.007
1,2,4-Tricholorbenzene	0.023
1,1,1-Trichloroethane	0.007

K020 nonwastewaters	Concentration (in mg/kg)
1,2-Dichloroethane	6.0
1,1,2,2-Tetrachloroethane	5.6
Tetrachloroethene	6.0

K020 wastewaters	Concentration (in mg/l)
1,2-Dichloroethane	0.007
1,1,2,2-Tetrachloroethane	0.007
Tetrachloroethene	0.007

K022 nonwastewaters (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Acetophenone	19.
Sum of Diphenylamine and Diphenylnitrosamine	13.
Phenol	12.
Toluene	0.034

K024 nonwastewaters	Concentration (in mg/kg)
Phthalic acid	28.

K024 wastewaters	Concentration (in mg/l)
Phthalic acid	0.54

K030 nonwastewaters	Concentration (in mg/kg)
Hexachlorobutadiene	5.6
Hexachloroethane	28.
Hexachloropropene	19.
Pentachlorobenzene	28.
Pentachloroethane	5.6
1,2,4,5-Tetrachlorobenzene	14.
Tetrachloroethene	6.0
1,2,4-Trichlorobenzene	19.

K030 wastewaters	Concentration (in mg/l)
o-Dichlorobenzene	0.008
p-Dichlorobenzene	0.008
Hexachlorobutadiene	0.007
Hexachloroethane	0.033
Pentachloroethane	0.007
1,2,4,5-Tetrachlorobenzene	0.017
Tetrachloroethene	0.007
1,2,4-Trichlorobenzene	0.023

K037 nonwastewaters	Concentration (in mg/kg)
Disulfoton	0.1
Toluene	28.

K037 wastewaters	Concentration (in mg/l)
Disulfoton	0.003
Toluene	0.028

NOTE: "Wastewater" means a waste containing less than 1% filterable solids and less than 1% T.O.C

Table CCW
Constituent Concentration in Wastes
40 CFR 268.43
(Continued)

K048 nonwastewaters (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Benzene	9.5
Benzo(a)pyrene	0.84
Bis (2-ethylhexyl) phthalate	37.
Chrysene	2.2
Di-n-butyl phthalate	4.2
Ethylbenzene	67.
Naphthalene	Reserved
Phenanthrene	7.7
Phenol	2.7
Pyrene	2.0
Toluene	9.5
Xylenes	Reserved
Cyanides (Total)	1.8

K048 wastewaters	Concentration (in mg/l)
Benzene	0.011
Benzo(a)pyrene	0.047
Bis (2-ethylhexyl) phthalate	0.043
Chrysene	0.043
Di-n-butyl phthalate	0.060
Ethylbenzene	0.011
Fluorene	0.050
Naphthalene	0.033
Phenanthrene	0.039
Phenol	0.047
Pyrene	0.045
Toluene	0.011
Xylenes	0.011
Chromium (Total)	0.20
Lead	0.037

K049 nonwastewaters (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Anthracene	6.2
Benzene	9.5
Benzo(a)pyrene	0.84
Bis (2-ethylhexyl) phthalate	37.
Chrysene	2.2
Ethylbenzene	67.
Naphthalene	Reserved
Phenanthrene	7.7
Phenol	2.7
Pyrene	2.0
Toluene	9.5
Xylenes	Reserved
Cyanides (Total)	1.8

K049 wastewaters	Concentration (in mg/l)
Anthracene	0.039
Benzene	0.011
Benzo(a)pyrene	0.047
Bis (2-ethylhexyl) phthalate	0.043
Carbon disulfide	0.011
Chrysene	0.043
2,4-Dimethylphenol	0.033
Ethylbenzene	0.011
Naphthalene	0.033
Phenanthrene	0.039
Phenol	0.047
Pyrene	0.045
Toluene	0.011
Xylenes	0.011
Chromium (Total)	0.20
Lead	0.037

K050 nonwastewaters (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Benzo(a)pyrene	0.84
Phenol	2.7
Cyanides (Total)	1.8

K050 wastewaters	Concentration (in mg/l)
Benzo(a)pyrene	0.047
Phenol	0.047
Chromium (Total)	0.20
Lead	0.037

K051 nonwastewaters (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Anthracene	6.2
Benzene	9.5
Benzo(a)anthracene	1.4
Benzo(a)pyrene	0.84
Bis (2-ethylhexyl) phthalate	37.
Chrysene	2.2
Di-n-butyl phthalate	4.2
Ethylbenzene	67.
Naphthalene	Reserved
Phenanthrene	7.7
Phenol	2.7
Pyrene	2.0
Toluene	9.5
Xylenes	Reserved
Cyanides (Total)	1.8

K051 wastewaters	Concentration (in mg/l)
Acenaphthene	0.050
Anthracene	0.039
Benzene	0.011
Benzo(a)anthracene	0.043
Benzo(a)pyrene	0.047
Bis (2-ethylhexyl) phthalate	0.043
Chrysene	0.043
Di-n-butyl phthalate	0.060
Ethylbenzene	0.011
Fluorene	0.050
Naphthalene	0.033
Phenanthrene	0.039
Phenol	0.047
Pyrene	0.045
Toluene	0.011
Xylenes	0.011
Chromium (Total)	0.20
Lead	0.037

K052 nonwastewaters (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Benzene	9.5
Benzo(a)pyrene	0.84
o-Cresol	2.2
p-Cresol	0.90
Ethylbenzene	67.
Naphthalene	Reserved
Phenanthrene	7.7
Phenol	2.7
Toluene	9.5
Xylenes	Reserved
Cyanides (Total)	1.8

K052 wastewaters	Concentration (in mg/l)
Benzene	0.011
Benzo(a)pyrene	0.047
o-Cresol	0.011
p-Cresol	0.011
2,4-Dimethylphenol	0.033
Ethylbenzene	0.011
Naphthalene	0.033
Phenanthrene	0.039
Phenol	0.047
Toluene	0.011
Xylenes	0.011
Chromium (Total)	0.20
Lead	0.037

K062 wastewaters	Concentration (in mg/l)
Chromium (Total)	0.32
Lead	0.04
Nickel	0.44

K071 wastewaters	Concentration (in mg/l)
Mercury	0.030

K086 nonwastewaters-Solvent Washes Subcategory (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Acetone	0.37
bis (2-ethylhexyl) phthalate	0.49
n-Butyl alcohol	0.37
Cyclohexanone	0.49
1,2-Dichlorobenzene	0.49
Ethyl acetate	0.37
Ethyl benzene	0.031
Methanol	0.37
Methylene chloride	0.037
Methyl ethyl ketone	0.37
Methyl isobutyl ketone	0.37
Naphthalene	0.49
Nitrobenzene	0.49
Toluene	0.031
1,1,1-Tricholorethane	0.044
Trichloroethylene	0.031
Xylenes	0.015

K086 wastewaters - Solvent Washes Subcategory	Concentration (in mg/l)
Acetone	0.015
bis (2-ethylhexyl) phthalate	0.044
n-Butyl alcohol	0.031
Cyclohexanone	0.022
1,2-Dichlorobenzene	0.044
Ethyl acetate	0.031
Ethyl benzene	0.015
Methanol	0.031
Methylene chloride	0.031
Methyl ethyl ketone	0.031
Methyl isobutyl ketone	0.0
Naphthalene	0.0
Nitrobenzene	0.044
Toluene	0.029
1,1,1-Trichloroethane	0.03
Trichloroethylene	0.029
Xylenes	0.015
Chromium (Total)	0.32
Lead	0.037

Table CCW
Constituent Concentration in Wastes
40 CFR 268.43
(Continued)

K087 nonwastewaters (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Acenaphthalene	3.4
Benzene	0.071
Chrysene	3.4
Fluoranthene	3.4
Indeno (1.2.3-cd) pyrene	3.4
Naphthalene	3.4
Phenanthrene	3.4
Toluene	0.65
Xylenes	0.070

K087 wastewaters	Concentration (in mg/l)
Acenaphthalene	0.028
Benzene	0.014
Chrysene	0.028
Fluoranthene	0.028
Indeno (1.2.3-cd) pyrene	0.028
Naphthalene	0.028
Phenanthrene	0.028
Toluene	0.008
Xylenes	0.014
Lead	0.037

K099 nonwastewaters	Concentration (in mg/kg)
2,4,-Dichlorophenoxyacetic acid	1.0
Hexachlorodibenzo-p-dioxins	0.001
Hexachlorodibenzofurans	0.001
Pentachlorodibenzo-p-dioxins	0.001
Pentachlorodibenzofurans	0.001
Tetrachlorodibenzo-p-dioxins	0.001
Tetrachlorodibenzofurans	0.001

K099 wastewaters	Concentration (in mg/l)
2,4,-Dichlorophenoxyacetic acid	1.0
Hexachlorodibenzo-p-dioxins	0.001
Hexachlorodibenzofurans	0.001
Pentachlorodibenzo-p-dioxins	0.001
Pentachlorodibenzofurans	0.001
Tetrachlorodibenzo-p-dioxins	0.001
Tetrachlorodibenzofurans	0.001

K101 nonwastewaters (Low Arsenic Subcategory-less than 1% total arsenic) (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Ortho-Nitroaniline	14.

K101 wastewaters	Concentration (in mg/l)
Ortho-Nitroaniline	0.27
Arsenic	2.0
Cadmium	0.24
Lead	0.11
Mercury	0.027

K102 nonwastewaters (Low Arsenic Subcategory-less than 1% total arsenic) (see also Table CCWE in §268.41)	Concentration (in mg/kg)
Ortho-Nitrophenol	13.

K102 wastewaters	Concentration (in mg/l)
Ortho-Nitrophenol	0.028
Arsenic	2.0
Cadmium	0.24
Lead	0.11
Mercury	0.027

K103 nonwastewaters	Concentration (in mg/kg)
Aniline	5.6
Benzene	6.0
2,4-Dinitrophenol	5.6
Nitrobenzene	5.6
Phenol	5.6

K103 wastewaters	Concentration (in mg/l)
Aniline	4.5
Benzene	0.15
2,4-Dinitrophenol	0.61
Nitrobenzene	0.073
Phenol	1.4

K104 nonwastewaters	Concentration (in mg/kg)
Aniline	5.6
Benzene	6.0
2,4-Dinitrophenol	5.6
Nitrobenzene	5.6
Phenol	5.6
Cyanides (Total)	1.8

K104 wastewaters	Concentration (in mg/l)
Aniline	4.5
Benzene	0.15
2,4-Dinitrophenol	0.61
Nitrobenzene	0.073
Phenol	1.4
Cyanides (Total)	2.7

No Land Disposal for
- K004 Nonwastewaters [Based on No Generation]
- K008 Nonwastewaters [Based on No Generation]
- K015 Nonwastewaters [Based on No Ash]
- K021 Nonwastewaters [Based on No Generation]
- K025 Nonwastewaters [Based on No Generation]
- K036 Nonwastewaters [Based on No Generation]
- K044 [Based on Reactivity]
- K045 [Based on Reactivity]
- K047 [Based on Reactivity]
- K060 Nonwastewaters [Based on No Generation]
- K061 Nonwastewaters - High Zinc Subcategory (greater than or equal to 15% total zinc) [Based on Recycling] effective 8/8/90
- K069 Nonwastewaters - Non-Calcium Sulfate Subcategory [Based on Recycling]
- K083 Nonwastewaters - No Ash Subcategory (less than 0.01% total ash) [Based on No Ash]
- K100 Nonwastewaters [Based on No Generation]

NOTE: "Wastewater" means a waste containing less than 1% filterable solids and less th[illegible]% T.O.C.

Van Waters and Rogers, Inc.
12 August 1988

Exhibit C-6

WASTE VERIFICATION FORM

Customer: _____

Initial Analysis

EPA Waste Code: _____ D.O.T. Proper Shipping Name: _____
Sample I.D.: _____ Sample Date: _____

Current Analysis

EPA Waste Code: _____ D.O.T. Proper Shipping Name: _____
Sample I.D.: _____ Sample Date: _____

(Weight %)	Initial Waste Analysis	Current Waste Analysis	Difference	* Pass/Fail
General Chemical Composition:				
Alcohols				
Esters				
Inhibitors				
Ketones				
Aliphatic Hydrocarbons				
Others				
Chlorinated Solvents				
Aromatic Hydrocarbons				
Miscellaneous				
Specific Chemical Composition:				
Ethyl Alcohol				
Methyl Alcohol				
Isopropyl Alcohol				
Freon TF				
1,1,1 Trichloroethane				
Xylene				
Mineral Spirits				
Perchloroethylene				
Methylene Chloride				
Toluene				
Trichloroethylene				
Methyl Ethyl Ketone				

* Fails if difference between current sample and initial sample is greater than 50.0%.

Required Action:

_____ None Required

_____ Call Generator

_____ Require new waste stream analysis

_____ Require written explanation

_____ Other

Van Waters & Rogers Inc.
WASTE ANALYSIS AND VERIFICATION PROCE S

1. Upon initial contact from a prospective customer who wishes to employ VW&R and McKesson Envirosystems* services to recycle a spent stream, a VW&R representative is either sent to the customer's location or makes contact with him to acquire a prepared Spent Material/Waste Product Survey form (copy attached along with preparation instructions). VW&R strongly urges the customer (who is the generator) to provide us with a physical and chemical analysis which he has either performed or has obtained from an outside laboratory.
2. The completed Spent Material/Waste Product Survey form and any laboratory physical and chemical analysis are returned to the respective branch which will be handling the generator's waste stream. A copy of the survey and any analyses are kept on file at the branch facility, while the original is mailed to McKesson Envirosystems* along with copies of any laboratory analysis.
3. McKesson Envirosystems* will evaluate the data contained on the Spent Material/Waste Product Survey form and the analytical reports on the waste stream and determine if the recycling facility has sufficient information to properly manage the material. A sample may be required by McKesson Envirosystems* before a decision is made as to whether to accept a particular waste stream and, if so, copies of the laboratory reports are forwarded to the VW&R branch facility before the material is picked up.
4. Once McKesson Envirosystems* has made a determination that sufficient knowledge of a particular waste stream is on hand, and approval is given by the Environmental Engineer, Marketing Manager, and Corporate Manager of Refinery Operations, the VW&R branch is notified.

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* or another permitted facility

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5. With this approval on hand, the VW&R branch will notify the generator that the branch is authorized to pick up the material in accordance with the following procedure:

   A. The generator completes an appropriate Hazardous Waste Manifest based on the Survey form and accompanying analytical data.

   B. A copy of the Manifest is supplied to the local VW&R branch and is checked.

   C. A copy of the Manifest, after its approval by Branch Management, is given to the truck driver and is to be in his possession until delivery of the material to the branch.

   D. The material to be picked up is compared to the listing on the Manifest by the driver. In addition, he:

      a. Evaluates the container for condition - scaled, with no apparent leaks.

      b. Locates the precautionary warning label, if required.

      c. Ensures that no other labelling or stencilling is on the container other than the Hazardous Waste label, including trademarks, original vendor names, and the like.

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E. The driver also makes sure the Hazardous Waste Label on the drum is complete:

a. Generator name and address.

b. Contents.

c. Manifest number.

d. Proper shipping name.

e. E.P.A. ID number.

f. Accumulation starting date.

F. The driver picks up only that quantity and class of hazardous waste appearing on the Manifest.

6. Upon notice to McKesson Envirosystems that VW&R branch requires pick up of an accumulated load of spent material, McKesson Envirosystems' * simultaneously forwards a copy of all data accumulated on a particular waste stream to the respective recycling facility for review and filing at that location so that this information is available before actual receipt of the waste stream.

7. At the time a shipment is received at the recycling facility, a measurement and recording of the volume received of a particular generator's stream is made. Verification is made that the count contained on the accompanying shipment manifest document corresponds to the number of containers received and that the lot numbers assigned by the VW&R branch handling (storing) the spent stream are accurate. A sample is drawn from the various drum utilizing a sampling tube which will ensure a homogeneous (cross section) representation according to the following schedule:

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* or another permitted facility

7. cont'd.

a. For ten or less drums in a particular generator's lot of a given product, all drums are sampled.

b. For more than ten drums in a particular generator's lot of a given product, a statistical sampling of 40% of all drums, but not less than ten drums, is taken.

The container samples are then taken and an aliquot representation is composited for analytical verification. The sample taken at the recycling facility is labelled and identified with the following information

a. The manifest number.

b. The generator's E.P.A. identification number.

c. The proper D.O.T. shipping name as it appears on the hazardous waste label on the drum.

d. The E.P.A. hazardous waste code as it appears on the hazardous waste label on the drum.

e. The date on which the shipment is received.

f. The initials of the individual who took and composited the sample.

The drums are held in a specially designated and contained storage area where they are segregated according to generator and waste identification until the lab verification results are returned.

8. The composite sample of the received containers is taken to the on-site lab where gas chromotagraphic analysis is performed to ensure that the material is in fact one and the same as the description on the Spent Material/Waste Product Survey form, the manifest, the drum label, and any

lab reports which the generator may have provided. Based upon the results of the chromatographic analysis, further tests will be conducted as warranted Once verification is made, the approval is given by the Plant Manager, or that individual's designee, for movement of the drums into the processing area.

9. Should a discrepancy become apparent during the verification analysis, the recycling center will contact the VW&R branch who will in turn contact the generator to inform him of the discrepancy. Based upon the findings of the lab and the contact with the original generator, the shipment of the material having the evidence of a discrepancy may be refused, or an alternate means of handling the shipment will be arranged with the original generator.

10. A copy of the gas chromatographic analysis is returned to the VW&R branch which was temporarily storing a generator's spent material. This copy is placed into the customer's file (original generator), which also contains a copy of the original Spent Material/Waste Product Survey form, any laboratory analytical reports, and any and all correspondence between any of the parties involved regarding that particular generator's waste stream.

The net result of the preceding is that all shipments of recyclable materials sent to one of the recycling facilities are verified by the latter before they are processed. This step not only verifies the economic value of the spent stream but prevents damage to the equipment and hazard to personnel due to unexpected ingredients in the solvent.

Section 1. General
Complete company name, address and zip code.
If generating plant is in a different location, please note

Omit Product Code.

Section 2. Marketing
The accurate completion of this section has a direct effect
A. Pricing
B. Method of pick up
C. The decision as to where the spent material will be
D. The request for a sample.

Section 3. Physical Properties
Complete to your best ability
If the generator has any other analysis i.e. WR&R or Indepe
laboratory, please attach.

Section 4. Hazardous Properties
Under RCRA hazardous waste will meet 4 basic properties:

A. Ignitable Flash Point $<140^{\circ}F$ Actives, Hydrocarbons
Lacquer Thinners, and blends of these sol
B. Toxic Chlorinated and Fluorocarbons
C. Corrosive Acids, Caustics, PH ≤ 2 or > 12.5
D. Reactive TNT Waste water, Sodium Metal

Describe the property relative to the waste stream.

Section 5. EPA-DOT Identification
EPA hazardous waste numbers can be found by using the attached listing. (Taken from CFR #40, 5-19-80)
Hazard codes describing the waste's properties listed in Section 4 can be found on the same listing.
DOT hazardous material descriptions in addition to their hazard class and identification (UN or NA) numbers are found in the Hazardous Materials Table 5-22-80. A copy of this table should be on file at each VW&R bran

Section 6. Chemical Composition
The basic components of the waste should be listed in this section along with their percentages of composition.
Again any other analysis reports on the stream should be attached.

Section 7. General
Any other information relative to the stream, or customer specifications on reclaimed and returned material, ie. drying addition of virgin material, packaging should be listed her

Section 8. The generator must sign this survey form.

Phone number, date filed, and federal EPA I.D. number must be completed.

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FOR OF
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Spent Material / Waste Products Survey

Please provide all information requested below, then return this form to your local VW&R *Representativ*

COMPANY (1)	SIC NUMBER
MAILING ADDRESS	PRODUCT CODE

DESCRIPTION OF SPENT MATERIAL / WASTE PRODUCT (2)

INDICATE PROCESS WHICH GENERATES THIS SPENT / WASTE (BE SPECIFIC)

VOLUME	FREQUENCY			PACKING	
	PER MONTH	PER YEAR	ONE TIME	IN DRUMS	IN BULK

PHYSICAL PROPERTIES: (3) (DATE OF LAB ANALYSIS _____)

PHYSICAL STATE AT 70°F

SOLID _____ LIQUID _____ FLASH POINT _____

SEMI-SOLID _____ PH _____

SPECIFIC GRAVITY _____ % CHLORINE _____

% SULFUR _____ BTU PER LB/GAL _____

HAZARDOUS PROPERTIES:

DESCRIBE— (4)

EPA / DOT IDENTIFICATION:

EPA HAZARDOUS WASTE NUMBERS (5) _____ EPA HAZARD CODES _____

DOT HAZARDOUS MATERIAL DESCRIPTION _____

CHEMICAL COMPOSITION:

SUBSTANCE	MIN	MAX	TYP	SUBSTANCE	MIN	MAX	TYP
(6)							

GENERAL:

1. PLEASE PROVIDE LAB ANALYSIS IF HEAVY METALS, CYANIDES, PESTICIDES, CARCINOGENS OR OTHER TOXICS ARE INVOLVED.
2. PLEASE DISCUSS ANY OTHER INFORMATION WHICH MAY HELP McKESSON BE OF SERVICE: (7)

PLEASE ATTACH ANY ADDITIONAL HAZARD AND HANDLING INFORMATION TO THIS SHEET.

TO THE BEST OF MY KNOWLEDGE AND ABILITY TO DETERMINE THIS IS A COMPLETE AND ACCURATE DESCRIPTION OF THIS MATERIAL

SIGNATURE (8)	TITLE	
PHONE NUMBER (INCLUDE AREA CODE)	DATE	EPA IDENTIFICATION NO.

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Van Waters & Rogers Inc.

Security

(40 CFR Sec. 122.25(a)(4), 264.14)

This VW&R facility employs a number of measures designed to assure adequate security in order to comply with government regulations and to assure the protection of Company assets.

This facility does not utilize a 24-hour entry surveillance system, but does have other means of control to provide adequate security. A fully automatic and monitored 24-hour fire alarm system is present at the facility.

The entire facility including the outside yard storage area, in which the designated waste storage area is included is maintained in a secure manner. As will be ovserved from the facility diagram, the building walls act as a barrier on the north side of the complex. On the east wall at the end of the building, fencing begins and surrounds the entire yard and truck dock and loading/unloading area until meeting up with the southwest corner of the building.

The fencing utilized to surround the outside areas of the facility where storage and loading/unloading activities are undertaken, is constructed of a 6 foot high, fabric type 11 gauge, 2 inch mesh chain link fence. Above the mesh fencing, supported on the top of the steep upright posts, are arms projecting 1 foot at a 45 degree angle from vertical, and holding 3 strands of barbed wire strung around the entire fence.

Access to the areas of the facility which are surrounded by the fence will be by means of one of two gates. Vehicle traffic may gain access to the loading/unloading dock area by way of a 24 foot gate constructed of similar materials as the fixed fencing previously described. This access is in

the western stretch of fence located to the South side of the building. The other access point through the fence consists of a 3 foot gate of similar construction to accomodate the rail entry. This gate is located on the eastern stretch of fence.

Both of the above mentioned gates are maintained in a closed and padlocked condition during all periods of facility non-working hours. During working hours, the fence gates are capable of being observed at all times from the general office. All visitors must gain access to the facility by way of the main office located on the northern side of the facility. A secured and attended vestibule area lies immediately inside the entrance door at which point a receptionist shall inquire as to the individual's identification and purpose of visit. While within the facility, it is VW&R policy that no one shall be allowed to gain access to any part of the immediate facility without having a VW&R employee accompanying them at all times. Any visits and/or inspections which may be pertinent to the functioning of the facility as a hazardous waste management facility, are to be logged in the facility's operating log.

All doors, as well as gates which were previously described, are maintained in a locked and secured condition during non-working hours.

Warning signs are posted at all fence gates and several other fence locations around the facility in such a manner to be visible from all angles of approach, and shall bear the legend "Danger-Unauthorized Personnel Keep Out". There shall also be "No Smoking" signs posted in prominent positions in the yard and loading areas, as well as other precautionary and safety signs, to assure that no ignition sources are present in these areas. The restriction of smoking to

only designated areas is again a standard VW&R working rule.

No materials, empty pallets, or drums are permitted to be stacked against the fence in order to prevent easy agress or concealment.

All critical locks are changed when a key holder leaves the Company, when a key is lost, or every two years, whichever occurs first.

All available lighting will be utilized to illuminate the buildings, fence, and yard. Electric timer switches are installed to control the lighting.

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Van Waters & Rogers Inc.

Inspection Schedules, Equipment Requirements, and Preventative Measures

(40 CFR Sec. 122.25(a)(5), 264.15, 264.174, 264.194,

264.254, 264.255, 122.25(a)(6)

As a result of VW&R being only a distributor of chemicals (no manufacturing, no processing), any branch will employ a limited variety of equipment in its daily business. Those few pieces, plus particularly all equipment and apparatus involved with safety, do receive regular well-defined inspections routinely, and all are subject to preventive maintenance. The net result is a constant evaluation of all relevant equipment and its operation for possible malfunctions, structural deterioration, operator errors, and unintentional misuses which could affect human health or the environment.

Table 1 shows the items which are routinely inspected and the types of problems which could present themselves or cause an item to be nonfunctional. The items have been selected as those being important to the facility maintaining a safe working environment for the employees, and to being valuable in preventing a threat to the public and/or ecological systems.

Included in Table 1 is a listing of the frequency with which the items are inspected. It should be noted that in addition to these inspections which are routinely done by the branch personnel, VW&R other Company personnel not stationed at the facility, conduct a "Safety Audit" of the operation on a quarterly basis. This policy has been in place since 1978 and entails either the facility's District Manager or a member of the Regional Operations Department Staff's visiting the branch for what typically is a full day to inspect and evaluate the facility in approximately 180 areas pertaining to safety and operating procedures. Examples of areas checked are:

1. Office area
2. Drivers' records
3. Fire protection
4. Maintenance
5. Compliance with OSHA, DOT, all applicable rules and regulations
6. Security
8. Warehouse & dock
9. Yard area
10. Transportation
11. Physical layout & equipment
12. General recordkeeping and control
13. Compatibilities of stored materials.

Inspections of the hazardous waste container storage area will be conducted as outlined in Table 1. Results and documentation of any remedial actions which might be required will be recorded on an inspection log sheet similar to the one found following this narrative and entitled "Inspection Log Form". Information to be included on the log sheet shall include the item inspected, date and time of inspection, name of inspector, remedial action (if necessary), and supervisor's signature. VW&R has also developed the form entitled "In House Container Inspection Checklist", which is included immediately following the Inspection Log Form. Included on this form is a listing of areas which should be reviewed pertaining specifically to the area of container management. The inspector is required to check the status of each item and make a decision as to acceptable or unacceptable. On the lower portion of the form, are action codes for remedial activities which might be necessary to implement if conditions are found which might necessitate some action. Upon discovery, the appropriate personnel shall ensure that the proper actions to remedy an unsafe situation are undertaken. Any remedial actions shall be noted and kept on file with appropriate reports made, if necessary.

In additon to container inspections being logged, similar documentation is undertaken for Company quarterly safety inspections, sprinkler system inspections (weekly), fire extinguisher inspections (monthly) maintenance checklist (as designated by specific area), and governmental inspections (as performed).

This facility of VW&R does not utilize tanks of any sort for the management of waste materials. Thus, the regulations pertaining to inspections and the logging of such inspections on this type of equipment is not applicable.

This facility likewise does not utilize waste piles as a means of managing wastes, and the regulations pertaining to inspections and the logging of such inspections are not applicable.

If VW&R personnel, upon a routine inspection, find that a condition is present of a non-emergency nature which requires some type of maintenance in order to bring that particular article into compliance with standards, it shall be that employee's responsibility either to bring the subject concern into compliance, or to bring it to the facility management's attention to correct the deficiency. All remedial actions are undertaken at the earliest possible time in order to alleviate potential for further deterioration of equipment, or to eliminate an unsafe condition which could pose a threat to health or the environment.

If during an inspection a situation would be found which is of an emergency nature, or has the potential to be, the employee shall immediately initiate

remedial action, and notify the appropriate emergency coordinator who shall carry out his/her actions as outlined in the Contingency Plan. As outlined within the Contingency Plan, in the event of a release of materials, it shall be the objective to contain, isolate, clean-up, and decontaminate the affected area with the utmost concern for minimizing risk to Company workers, the public, and the environment. The clean-up material must then be properly disposed of, and necessary documentation and reporting undertaken.

Inspection logs are maintained and kept at the facility by the Operations Manager. The format of the inspection log is included at the end of this narrative and is to be maintained at the facility for a minimum of 3 years from the date of inspections. Any extraordinary occurrences such as a waste release or fire requires a written report which shall be kept on file at the facility, as well as being forwarded to the appropriate agencies and Company personnel as outlined in the "Contingency Plan" section.

VW&R does not request a waiver of the preparedness and prevention requirements under 40 CFR 264 Subpart C. Requirements of this section of the regulations are to be complied with.

Specific discussion pertaining to internal and external communications capabilities, the internal alarm system, emergency equipment present on-site, fire control equipment present on-site and training in its use, is discussed either in this section accompanying "Contingency Plan".

The telephone system at this facility provides the main internal as well as external means of communication. A designated alarm system is utilized by

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branch personnel to act as an alert system for emergency situations with instruction and drills conducted on a routine basis.

Emergency equipment maintained at this facility is listed in the Contingency Plan.

Adequate water is provided at this facility by means of fire hydrants as shown on the facility site plan. The building itself is protected by a sprinkler system with an automatic alarm system hookup, although no waste materials are stored within the building.

Table 1

Van Waters & Rogers Inc.

Inspection Schedule
(To be kept at Facility)

Area/Equipment	Specific Items	Types of Problems	Frequency of Inspection
Container Storage Area (Secondary Containment)	General Area	Leaks, spills	Daily
	Container placement and stacking	Aisle space	Weekly
	Sealing of containers	Open bungs, lids	Weekly
	Labelling of containers	Improper identification Date missing illegibility	Weekly
	Base	Cracks, erosion	Daily
	Berm	Cracks, deterioration	Daily
	Warning signs	Damaged	Weekly
	Debris & refuse	Aesthetics	Weekly
	Accumulated liquid	Contamination	Daily, and confirm after precipitat
Security Devices	Facility fence	Corrosion, damage	Weekly
	Main Gate	Corrosion, damage, non-functioning	Weekly
Loading, Unloading Areas	Surface areas	Deteriotation spills	Daily
	Dock bumpers	Damage	Daily

Area/Equipment	Specific Items	Types of Problems	Frequency of Inspection
Safety & Emergency Equipment	Emergency shower & eye wash	Water pressure, leaks drainage	Weekly
	Industrial absorbent	Out of stock	Monthly/ as needed
	Overpack drums	Out of stock	Weekly
	Face shields	Broken or dirty	Monthly/ as needed
	Chemical cartridge respirators with cartridges for organic solvents	Spent solvent, seals	Monthly/ after each use
	Portable pump	Power, clogging	Monthly
	Fire extinguishers	Recharging	After each use
	Fire alarm systems	Power failure	Per NFPA
	Telephone system	Power failure	Per NFPA
	Emergency lighting system	Battery failure	Per NFPA
	First aid equipment and supplies	Items out of stock or inoperative	As used
	Protective clothing	Holes, wear & tear	As used
	Decontamination wash room	Water pressure, leaking drainage	As used
	Forklifts	Brakes (includes parking), tires (pressure), horn, lights, hoist, tilt, forks, steering, water level rad/batt., engine oil level, hydraulic oil leak	Daily

Van Waters & Rogers Inc.

In House Container Inspection Checklist

A. Location	YES	NO	Recommended Action
1. Waste materials properly segregated according to VW&R compatibility storage program.	___	___	_____
2. Ignitables (flammables, combustibles) located 50 feet from property lines.	___	___	_____
3. Aisles provided for emergency access.	___	___	_____
B. Container Condition			
1. All containers sealed.	___	___	_____
2. Any leaking containers.	___	___	_____
3. Any containers swollen or bulged.	___	___	_____
4. Any containers concaved due to vacuum building up.	___	___	_____
5. Any containers with extreme corrosion	___	___	_____
6. All containers properly labelled and identified.	___	___	_____
8. All containers have lot number	___	___	_____
9. All containers compatible with products stored in them.	___	___	_____

Inspector: _____ Date: _____

I have reviewed this report and certify all storage is in satisfactory condition

Supervisor: _____ Date: _____

Recommended Action Codes

A - Effect VW&R compatibility program

B - Effect container receiving maintenance procedure

C - Effect container transfer procedure

D - Effect spill control procedure

I certify that the above recommended action has been taken on:

Date: _____ Storage is now satisfactory.

Supervisor: _____ Date: _____

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INSPECTION					RESULTS		
SUBJECT	DATE	TIME	INSPECTOR	OBSERVATIONS	REMEDIAL ACTION REQUIRED	DATE COMPLETED	INSPECTOR

Van Waters & Rogers Inc.

Contingency Plan

VW&R is an established major distributor and repacker of a wide variety of industrial chemicals and solvents, many of which are hazardous (flammable, corrosive, toxic, oxidative). Consequently, the Company has long had in place a formal Emergency/ Contingency Program designed to protect its employees, its property, and that of its neighbors and the general public in the event of an emergency. The expansion of the facility's business to include the temporary storage of a limited variety of spent solvents (all of which are sold as virgin grades by the facility) has required only a modest modification of the existing Plan to cover the additional requirements imposed by management of hazardous wastes.

Each branch of VW&R is only a distributor of industrial chemicals and solvents. No manufacturing or processing activities are carried out at this facility. The company purchases chemical commodities from various manufacturers and distributes them to customers which utilize these products in their manufacturing processes.

The owner of this facility is VW&R

All facility personnel involved with implementing emergency procedures are identified in the facility's

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Emergency and Contingency Program (the "Contingency Plan"), a copy of which is located in the Appendix of this Application. Home phone numbers are noted in the "Emergency Phone Number" section for the Branch Manager, the Emergency Coordinator and the latter's alternates.

VW&R fundamental involvement as it relates to hazardous waste management is that of receiving back from off-site generators spent solvents, temporarily storing them in order to accumulate economic truckloads, and then reshipping these materials to a recycling center at another location. Materials considered hazardous wastes are stored in a specific area (or areas) on the property. All materials are handled in drums of 55 gallon capacity or less as described in the section entitled "Containers Utilized Holding Free Liquids". The maximum storage of drums shall be 512 and the designated storage area is shown on the engineering plot plan under "General Description of Facility". A detailed description of this area is located in the section entitled "Secondary Containment System Design and Operation". A copy of the facility's Contingency Plan, including site plans locating location of emergency equipment and evacuation routes, has been distributed to local emergency authorities; receipts are appended.

In the event of an emergency situation, the individual making discovery of the occurrence is to immediately notify the Emergency Coordinator or his Alternate; if neither is available, the next Alternate listed on the

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Emergency Phone Number listing, and so on. The Emergency Coordinator, as do his alternates, has the authority to commit Company resources and to initiate requests for assistance to any emergency agency — several of the latter are listed in the Contingency Program.

The phone number listings and emergency agencies outlined in the Plan are prominently posted within the facility and are kept readily available by the Emergency Coordinator and his alternates.

The decision is made by the Coordinator or his alternate as to whether a given emergency situation poses imminent threat to human life, health, or the environment to an extent that implementation of the Contingency Plan is required.

In any emergency situation, it is important that the outline of actions and procedures to be followed be as concise as possible to allow the response to be so prompt as to minimize risk. For this reason, the Plan includes the Emergency Phone Number Listing and Emergency Procedures to be followed by this facility. For purposes of this Application, an elaboration of specific areas will be discussed for various considerations pertaining to the Contingency Program. This will also be used by facility management for reference.

The Contingency Plan will be implemented for any of the following situations:

1. Fire and/or Explosion - the Coordinator or his alternate must make an assessment as to the number of different potential problems or

situations which might occur in an emergency, and how to deal with them. Consideration must be given to items such as:

- Release of fumes and possible necessity for neighbor evacuation.
- Presence of materials which when exposed to fire could explode, resulting in flying debris which could spread fire to off-site areas or to previously unaffected areas at the facility.
- Explosions which could result in the release of materials from containers.
- Residues from fire fighting activities which may require containment, handling, and disposal in an appropriate manner if deemed hazardous.

2. Spills or Material Release - The Coordinator or his alternate must make an assessment and take necessary actions to alleviate risk in such a situation. Consideration must be given to the following potential threats:

   - The potential for the released material's being a flammable liquid which would pose a fire hazard.
   - The possibility of ground contamination which would require removal and proper disposal of soil so contaminated.

- Dealing with surface water which may become contaminated with the released material. Every effort is made to prevent such mixing.
- Awareness and guarding for potential ignition sources, and determination as to whether the release of fumes could pose a fire and/or explosion hazard which would necessitate neighbor evacuation.

3. Floods - Regardless whether a facility is or is not located in a floodplain, the Emergency Coordinator must remain cognizant of weather conditions and implement removal of materials to higher ground or to a safe, permitted facility if necessary. Contact with the National Weather Service would be initiated in the event that conditions are present which could bring about possible flooding.

It is a VW&R policy that emergency plans and procedures be kept available at the facility and that emergency drills be conducted at 6-month intervals in which all facility personnel participate.

As mentioned previously, in the event of an emergency situation the Emergency Coordinator must be notified, or in his absence, an Alternate in descending order as listed on the Emergency Coordinator listing. The Coordinator at that time determines the appropriate measures to be implemented (e.g., alarms, evacuation, etc.) and what Federal, state, or local agencies as well as fire and police departments, must be advised to render assistance.

In the event of a release or fire, the Coordinator will determine by observation, facility records, or analysis (if time permits), what the identity of the material involved is, its exact source, quantity, and extent of impact the released material could have from a health, safety, and environmental aspect.

An assessment of the situation must be made to determine possible hazards to human health and/or the environment due to the emergency. The Coordinator must look at all possible direct and indirect effects which might result from the emergency. The Coordinator must further determine whether facility personnel are adequately equipped to deal with the situation, or whether it is necessary to contact outside emergency agencies for assistance.

The potential incidents which are of highest priority for emergency planning at this facility are (1) fire and/or explosion, and (2) spills or material releases. Other natural disasters such as tornados, earthquates, or floods, would be handled in similar response manners as outlined in the Contingency Plan as deemed appropriate by the Emergency Coordinator.

The outside storage yard, including the designated waste storage area, is accessible by means of entry through the loading area and the gates in the fence. This area is paved and remains unobstructed at all times.

Fire

Personnel at the facility have been provided instruction by the local fire department on use and application of various on-site fire extinguishers for fire fighting efforts until appropriate outside emergency teams arrive. The efforts of facility personnel shall center on extinguishing the fire or preventing its spread, without taking undue risks to themselves.

The Coordinator shall assure that, if appropriate, the evacuation signal is given, at which time all personnel who are not directly involved in the incident control efforts are to proceed to their designated congregation points which are indicated on the site diagram included in the Contingency Plan. All activities within the facility will cease and apparatus such as forklifts, trucks, and emergency equipment removed from the building proximity as time allows. Power sources are shut down. Traffic flow and outside observers are controlled and the area isolated to alleviate potential additional ignition sources. Should the materials which may be affected by the emergency be of such a nature as to pose a threat of conflagration, explosion, or fume release, the Coordinator shall advise emergency personnel, and render any assistance necessary to implement evacuation of the surrounding area within ¼ mile. All employees are trained and partake in drills on evacuation procedures and are instructed not to leave the designated congregation point unless so directed by the party responsible for accounting for all employees.

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Spills

Spills or material releases upon discovery must be reported to the Emergency Coordinator or his alternate. Immediate response is required to minimize the impact of the release. The Coordinator must assess the proper actions and precautions to be taken to protect human health and the environment. He must also initiate appropriate activity to identify, contain, collect, and properly dispose of the material.

Because this facility deals with only containerized materials in waste form, the amount of material which has potential for release from one container is relatively small. However, prompt and safe procedures must be followed to deal with a situation in an appropriate manner.

The Coordinator must make continual assessments as to the potential impact the release may pose such as fire hazards, fume escapes which would necessitate evacuation of the facility and/or neighbors, need for clean-up (assuring the proper utilization of safety equipment to undertake this activity), determination of the necessity for calling in outside emergency agencies, and initiating the required reporting and documentation of the incident (i.e., materials designated by RQ quantities as listed under Superfund, Solid Waste Disposal Act, Clean Air Act, or TSCA; or which could be classified as a hazardous waste under RCRA).

The secondary containment devices will catch materials released from drums during storage, and upon discovery of leakage during inspections, the Coordinator is to be notified and will initiate appropriate clean-up

measures. Liquid material will be removed by means of a portable transfer pump, and placed into an appropriate specfication drum for the material. Because the secondary containment units are tightly constructed, and the surface material on which the secondary containment area is placed while material is present is constructed of an impervious material (concrete or asphalt), there should be no risk of soil contamination. All accumulated liquids and collected clean-up materials will be labelled and marked as appropriate for the material. Samples of materials released shall be taken if for any reason a question arises as to composition or hazard due to multiple container releases, water or extinguishing material dilution, etc.

Should soil contamination somehow occur, a layer of soil shall be removed to an adequate depth to assure that all contamination is removed. The contaminated soil shall be placed into open-top drums and sealed for proper disposition.

Appropriate safety equipment usage shall be enforced during all transfer and clean-up activities. Proper documentation of the incident in the facility records shall be made. Reporting of the incident to Federal, state, local, and Company personnel shall be undertaken as appropriate. In the event that the Contingency Plan must be implemented and the incident is reportable as defined by 40 CFR 264.56(J), a written report shall be filed with the Regional office of the USEPA and the appropriate state office.

In addition to any reports required by government agencies, VW&R requires incidents to be reported within 48 hours to the appropriate Regional Operations Department.

If for some reason released material were to escape the secondary containment area, the Coordinator shall dispatch response personnel to contain the leakage by means of an inert material such as sandbags, Hazorb absorbent, or standard industrial absorbents (Zorb-All). The same procedures, efforts, clean-up, safety considerations, assessments, and documentation/reporting requirements shall be followed as was outlined previously.

All receipts of waste materials shall be ceased until clean-up proceedings are completed and activities are returned to normal.

Collected materials from a release situation will typically be disposed of through McKesson Envirosystems Company* In the event that they were unable to deal with the materials based on permits and/or technology, an outside disposal firm would be contracted with to make disposition of the material. In any event, the Coordinator shall be responsible to ensure that the firm handling the disposion of the material is properly permitted and has the resources to deal with the residue in a proper fashion.

All equipment used in clean-up which may have become contaminated during such activities shall be decontaminated using materials as appropriate to cause removal of the contaminant. The resulting material from the

* or other proper recycling or disposal facility.

decontamination process shall be placed within a residual clean-up container for disposal, unless it is deemed incompatible with materials already contained in such vessel.

During any emergency situation, the Emergency Coordinator will take all reasonable measures necessary to ensure that fires, explosions, and releases, do not occur, recur, or spread to other unaffected areas of the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing and/or isolating containers.

Immediately after an emergency, the Coordinator or his alternate must provide for treating, storing, or disposing of recovered waste, contaminated surface water, or any other material that results from a release, fire, or explosion at the facility. Assurances must be made that all of these endeavors are undertaken in the appropriate manner as governed by Federal, state, and local laws. Residual material from clean-up operations shall be properly stored, marked, labelled, and handled to prevent any further incident.

The Emergency Coordinator must ensure that in an emergency situation, no waste which might be of an incompatible nature with released material is stored within the affected area of the facility until clean-up procedures are completed.

All emergency equipment listed in the Contingency Plan present at the facility and which may have been utilized during the emergency situation must be cleaned, recharged, inspected, replaced, and made fit for use before resuming normal operations.

This VW&R facility has a wide assortment of emergency equipment present for use in different emergency situations. On-site emergency equipment is kept in various designated locations within the warehouse, as well as each truck's having driver kits which contain specific items which may be utilized in potential emergency situations while on the road. A list of equipment and the capabilities of each item present at the facility is included in the appended Contingency Plan.

Fire extinguishers of a dry chemical variety meeting Type ABC fire fighting capabilities are located throughout the warehouse facility in such a manner that no point within the building proper is further than 50 feet from an extinguisher. The facility diagram included in the Contingency Plan locates these units. All extinguishers comply with National Fire Code standards for portable fire extinguishers, and they are inspected after each use and on a routine monthly and annual basis. Records of inspections are maintained.

Emergency and safety equipment available for use in an emergency is kept in the warehouse in designated areas as shown on facility diagram in the Contingency Plan, and includes the following:

BUTYL RUBBER ACID SUITS - protection of the wearer from contamination during container transfers or other emergency situations.

RUBBER BOOTS - same as butyl rubber acid suits; foot protection.

RUBBER GLOVES - same as butyl rubber acid suits; hand protection.

CHEMICAL GOGGLES - eye protection from possible splashes during emergency activities.

FACE SHIELDS - face protection from possible splashes during emergency activities.

HARD HATS - head protection from possible blows or contact with hard objects. The wearing of these is standardDSW, Inc. policy.

SELF-CONTAINED BREATHING APPARATUS - a 30 minute self-contained air supply unit which allows the wearer to enter a severe environment to deal with an emergency situation. This unit is compatible with the local fire departments units.

PORTABLE TRANSFER PUMP - utilized for transfer of the contents of a leaking drum into another drum, or for evacuation of the containment area. This unit is explosion-proof so as to not act as a possible ignition source.

EXTENSION CORDS - power supply transfer; of a three-prong grounded variety.

RECOVERY DRUMS - placement of leaking containers into these oversize open top drums is undertaken to prevent further spillage and allow shipment to a facility for disposition; 85 gallon capacity; could be used for spill clean-up materials also.

HAND TOOLS - repairs of equipment.

FIRE EXTINGUISHERS - 10 lb. ABC variety for fire protection.

REFLECTIVE TRIANGLES - traffic control.

FIRST AID KITS - minor medical treatment.

NEUTRALIZER SOLUTIONS - to neutralize and flush the eyes of an individual who might have material come into contact with the eye.

FLASHLIGHTS - emergency and portable lighting.

ABSORBENTS - the collection and clean-up of spill residue; could also be used to construct a temporary containment dike in an emergency situation.

SAND - same as "Absorbents".

BANDING TOOLS - device can be used to apply ½ - 1½" fiber banding around a container with a patching material to stop a leak.

SAFETY SHOWER - flushing of an individual with a constant water supply to remove any contamination with which an individual may have come into contact.

All pieces of equipment are routinely inspected to assure their readiness for use in an emergency situation. Review on the use of articles of safety equipment is undertaken periodically during the monthly safety meetings conducted at the facility with appropriate personnel. These meetings are documented.

VW&R has provided copies of the Contingency Plan, including site plot layout diagrams to the local emergency agencies which would be contacted for assistance in an emergency. Acknowledgements of the receipt of these materials from the appropriate agencies is on file at the facility. The contents were explained to the agencies and their input was accepted. The agencies receiving these materials are typically:

Local Fire Department

Local Police Department

Local Hospital and/or Emergency Center

The Emergency Coordinator shall decide whether to evacuate the facility in any emergency situation. In the event a determination is made that a situation is present which warrants facility evacuation, the Coordinator must assure that the following actions are carried out:

- Signal for plant evacuation.
- All individuals shall vacate the facility in an orderly manner to the congregation point designated on the site diagram included in the section "Topographic Maps".
- All persons which have not been assigned to render assistance in the control of the emergency situation by the Coordinator shall remain at the congregation point to be accounted for by the designated person(s). Reentry into the building, or permission to leave the site may only be granted by the Coordinator so as to assure all persons' being accounted for.
- In the event that an individual is determined to be missing at the congregation point the assigned individual whose responsibility it is to take a head count, shall notify the Coordinator of the missing person's identity. The Coordinator shall assess the conditions present and take appropriate actions to conduct a search.
- Drills shall be conducted at 6-month intervals in order to reinforce evacuation procedures.

As required under the regulations, a written report of emergency events shall be made within 15 days to the USEPA Regional Office and the appropriate state agency. The following information shall be provided in such report:

1. Name, address, and phone number of the owner or operator.
2. Name, address, and phone number of the facility.

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3. Date, time, and type of incident
4. Name and quantity of material(s) involved.
5. Extent of injuries (if any).
6. An assessment of actual or potential hazards to human health or the environment, where applicable.
7. Estimated quantity and disposition of recovered material that resulted from the incident.

These reporting requirements are above and beyond all VW&R reporting procedures which shall be adhered to and forwarded within 48 hours or less to the appropriate Regional Office of VW&R

The Contingency Plan will be reviewed and immediately amended whenever:

1. The facility permit is revised.
2. The plan fails in an emergency.
3. The facility changes in its design, construction, operation, maintenance, or other circumstances in a way that significantly increases the potential for fires, explosions, or releases, or changes in the response necessary in any emergency.
4. The list of Emergency Coordinators change.
5. The list of emergency equipment changes.

Because this facility has no tanks present containing waste materials, the Contingency Plan does not address spills or leaks from such vessels.

This facility likewise does not have waste piles present, and thus requirements under the regulations regarding planning for emergency situations for such waste management techniques are not applicable.

This facility does not utilize surface impoundments as a means of managing hazardous waste. Therefore regulations under this section which address this type of storage and the necessary emergency planning for such are not applicable.

This facility does not utilize any type of incinerator as a means of handling hazardous waste. Therefore regulations under this section which address this type of disposal and the necessary emergency planning for such, are not applicable.

This facility employees approximately 24 people in total, which simplifies the nature and relative complexity of accounting for individuals.

The facility has an alarm system to alert all employees as to an evacuation condition caused by fire, and to summon the fire department. The phone system is also equipped with an intercom which allows conversation between different areas of the building to initiate a total facility evacuation.

DOW CHEMICAL U.S.A. MIDLAND MICHIGAN 48640 EMERGENCY PHONE: 517-636-4400

EFFECTIVE DATE: 02 JUN 77 DATE PRINTED: 6 OCT 77 PRODUCT CODE: 55590

PRODUCT NAME: METHYLENE CHLORIDE, TECH. MSD: 0009

INGREDIENTS (TYPICAL VALUES-NOT SPECIFICATIONS)	%
METHYLENE CHLORIDE, ESSENTIALLY	100

SECTION 1 PHYSICAL DATA

BOILING POINT: 104F (39.8C) : SOL. IN WATER: 2.0G/100G @ 25C
VAP PRESS: 340 MMHG @ 20C : SP. GRAVITY: 1.320 @ 25/25C
VAP DENSITY (AIR=1): 2.93 : % VOLATILE BY VOL: 100 (ESSENT.)
APPEARANCE AND ODOR: COLORLESS LIQUID.

SECTION 2 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: NONE : FLAMMABLE LIMITS (STP IN AIR)
METHOD USED: TOC, TCC, COC : LFL: SEE SEC. 3* UFL: SEE SEC. 3*
EXTINGUISHING MEDIA: WATER FOG, NON-FLAMMABLE.
SPECIAL FIRE FIGHTING EQUIPMENT AND HAZARDS: SELF-CONTAINED RESPIRATORY EQUIPMENT.

SECTION 3 REACTIVITY DATA

STABILITY: STABLE.
*SEE JOURNAL OF CHEMICAL AND ENGINEERING DATA 17 (1) 69-93 (1972) FOR FLAMMABILITY LIMITS AT OTHER THAN STANDARD TEMPERATURE AND PRESSURE.
INCOMPATIBILITY: ----
HAZARDOUS DECOMPOSITION PRODUCTS: OPEN FLAMES AND WELDING ARCS CAN CAUSE THERMAL DEGRADATION WITH THE EVOLUTION OF HYDROGEN CHLORIDE AND VERY SMALL AMOUNTS OF PHOSGENE AND CHLORINE.
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION 4 SPILL, LEAK, AND DISPOSAL PROCEDURES

ACTION TO TAKE FOR SPILLS (USE APPROPRIATE SAFETY EQUIPMENT): SMALL SPILLS: MOP UP, WIPE UP OR SOAK UP IMMEDIATELY. REMOVE TO OUT OF DOORS. LARGE SPILLS: EVACUATE AREA. CONTAIN LIQUID; TRANSFER TO CLOSED METAL CONTAINERS. KEEP OUT OF WATER SUPPLY.
DISPOSAL METHOD: SEND SOLVENT TO A RECLAIMER. IN SOME CASES IT CAN BE

(CONTINUED ON PAGE 2)

DOW CHEMICAL U.S.A. MIDLAND MICHIGAN 48640 EMERGENCY PHONE: 517-636-4400
PRODUCT CODE: 55590
PRODUCT (CONT'D): METHYLENE CHLORIDE, TECH. MSD: 0009

SECTION 4 SPILL, LEAK, AND DISPOSAL PROCEDURES (CONTINUED)

DISPOSAL METHOD: (CONTINUED)
TRANSPORTED TO AN AREA WHERE IT CAN BE PLACED ON THE GROUND AND ALLOWED TO EVAPORATE SAFELY. REFER TO CHEMICAL SAFETY DATA SHEET SD-86, MANUFACTURING CHEMISTS ASSOCIATION, 1825 CONNECTICUT AVENUE, WASHINGTON, D.C., 20009

SECTION 5 HEALTH HAZARD DATA

INGESTION: LOW SINGLE DOSE ORAL TOXICITY. LD50 (RATS) IS 1.6 G/KG.
EYE CONTACT: PAINFUL AND SLIGHT IRRITATION. CORNEAL INJURY UNLIKELY.
SKIN CONTACT: SHORT CONTACT - NO IRRITATION. PROLONGED OR FREQUENTLY REPEATED CONTACT - POSSIBLE IRRITATION. IF CONFINED TO SKIN - MAY CAUSE A BURN.
SKIN ABSORPTION: VERY LOW. HAZARD NOT SIGNIFICANT.
INHALATION: TENTATIVE TLV 200 PPM (1975).
EFFECTS OF OVEREXPOSURE: INCREASING SIGNS OF ANESTHESIA ABOVE 900 PPM IN THE ATMOSPHERE. CARBOXYHEMOGLOBIN LEVELS MAY BE ELEVATED.

SECTION 6 FIRST AID--NOTE TO PHYSICIAN

FIRST AID PROCEDURES: CAUTION - NEVER GIVE FLUIDS OR INDUCE VOMITING IF PATIENT IS UNCONSCIOUS OR HAVING CONVULSIONS.
EYES: FLUSH WITH PLENTY OF WATER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS.
SKIN: FLUSH WITH PLENTY OF WATER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS.
INHALATION: IF ILLNESS OCCURS, REMOVE PATIENT TO FRESH AIR, KEEP HIM QUIET AND WARM. GET MEDICAL ATTENTION. IF BREATHING STOPS, START ARTIFICIAL RESPIRATION.
INGESTION: INDUCE VOMITING. CALL A PHYSICIAN IMMEDIATELY.
NOTE TO PHYSICIAN: CAUTION: WITH SOME SOLVENTS, DRINKING ALCOHOL BEFORE, DURING OR AFTER EXPOSURE MAY CAUSE UNDESIRABLE EFFECTS. OVEREXPOSURE TO MANY OF THE CHLORINATED SOLVENTS, ESPECIALLY IF ACCOMPANIED BY ANOXIA, MAY TEMPORARILY INCREASE CARDIAC IRRITABILITY. MAINTAIN ADEQUATE OXYGENATION UNTIL RECOVERY. AVOID SYMPATOMIMETIC AMINES, SUCH AS EPINEPHRINE, WHICH MAY PRECIPITATE ARRHYTHMIAS. EXPOSURE TO METHYLENE CHLORIDE PRODUCES CARBOXYHEMOGLOBIN WHICH MAY PERSIST SOMEWHAT LONGER THAN THAT DUE TO CARBON MONOXIDE EXPOSURE.

SECTION 7 SPECIAL HANDLING INFORMATION

VENTILATION: LIMIT CONCENTRATION IN AIR TO TLV.
RESPIRATORY PROTECTION: BELOW 200 PPM - NONE: RESPIRATORY PROTECTION REQUIRED IN THE ABSENCE OF ENVIRONMENTAL CONTROL. FOR LEVELS UP TO 2%

(CONTINUED ON PAGE 3)

DOW CHEMICAL U.S.A. MIDLAND MICHIGAN 48640 EMERGENCY PHONE: 517-636-4400
PRODUCT CODE: 55590
PRODUCT (CONT'D): METHYLENE CHLORIDE, TECH. MSD: 0009

SECTION 7 SPECIAL HANDLING INFORMATION (CONTINUED)

RESPIRATORY PROTECTION: (CONTINUED)
FOR 1/2 HOUR OR LESS, A SUITABLE FULL-FACE MASK WITH ORGANIC CANISTER SHOULD BE USED. ABOVE 2% AND FOR EMERGENCIES, USE A SELF-CONTAINED BREATHING APPARATUS.

PROTECTIVE CLOTHING: NO SPECIAL PROTECTIVE CLOTHING NEEDED.

EYE PROTECTION: SAFETY GLASSES WITHOUT SIDE SHIELDS. EYE WASH STATIONS AND SAFETY SHOWERS SHOULD BE READILY AVAILABLE.

SECTION 8 SPECIAL PRECAUTIONS AND ADDITIONAL INFORMATION

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: EXERCISE REASONABLE CARE AND CAUTION. AVOID BREATHING VAPORS. STORE IN COOL PLACE.

ADDITIONAL INFORMATION, IF ANY: ----

LAST PAGE

THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH, BUT NO WARRANTY, EXPRESS OR IMPLIED, IS MADE.

Form Approved
Budget Bureau No. 44-R1387
Approval Expires April 30, 1971

Form No. [illegible]
May [illegible]

U.S. DEPARTMENT OF LABOR

WAGE AND LABOR STANDARDS ADMINISTRATION
Bureau of Labor Standards

MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.
PPG Industries, Inc.	(318) 882-1200
ADDRESS (Number, Street, City, State, and ZIP Code): No. 1 Gateway Center, Pittsburgh, Pa. 15222	
CHEMICAL NAME AND SYNONYMS: 1,1,1-trichloroethane, methylchloroform	TRADE NAME AND SYNONYMS: TRI-ETHANE
CHEMICAL FAMILY: Chlorinated Hydrocarbons	FORMULA: CH_3CCl_3

SECTION II HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS	100	350	FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)

SECTION III PHYSICAL DATA

BOILING POINT (°F.)	165.4	SPECIFIC GRAVITY (H_2O=1)	1.31
VAPOR PRESSURE (mm Hg.)	120	PERCENT VOLATILE BY VOLUME (%)	100
VAPOR DENSITY (AIR=1)	4.54	EVAPORATION RATE (ether =1)	0.35
SOLUBILITY IN WATER	Negligible		
APPEARANCE AND ODOR	Colorless appearance, ethereal odor		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): None (Tag, open or closed)	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors can be ignited only by high intensity source of ignition. Combustion forms HCl and possible traces of phosgene.			

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: 350 ppm

EFFECTS OF OVEREXPOSURE: Loss of co-ordination and equilibrium to actual unconsciousness, and even death, in unventilated areas (such as tanks).

EMERGENCY AND FIRST AID PROCEDURES: Move to fresh air, use artificial respiration if breathing has stopped. Administer oxygen after breathing has been restored. (Never administer adrenalin!) Call physician (he should not administer adrenalin).

SECTION VI REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

INCOMPATABILITY (Materials to avoid): Avoid mixing with caustic soda and caustic potash.

HAZARDOUS DECOMPOSITION PRODUCTS: HCl and possible traces of phosgene.

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Adequate ventilation must be provided. Workmen should be provided with fresh air mask or sent to fresh air.

WASTE DISPOSAL METHOD: Forced ventilation or evaporation.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type): Fresh air masks

VENTILATION	LOCAL EXHAUST: Sufficient to maintain TLV	SPECIAL
	MECHANICAL (General)	OTHER

PROTECTIVE GLOVES: Neoprene or Viton

EYE PROTECTION: Glasses or goggles

OTHER PROTECTIVE EQUIPMENT: Neoprene apron

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

OTHER PRECAUTIONS

SECTION I	NAME
PRODUCT ▶	Methyl Ethyl Ketone
CHEMICAL/ SYNONYMS ▶	MEK, 2-butanone
CHEMICAL FAMILY ▶	Ketone
SHELL CODE ▶ 31210	C.A.S. NUMBER ▶ 78-93-3

24 HOUR EMERGENCY ASSISTANCE

SHELL 713-473-9461
CHEMTREC 800-424-9300

HAZARD RATING

LEAST 0 ▶ SLIGHT 1 ▶ MODERATE 2 ▶ HIGH 3 ▶ EXTREME 4

HEALTH 3
FIRE 3
REACTIVITY 0

SECTION II INGREDIENTS

COMPOSITION	%	TOXICITY DATA
Methyl Ethyl Ketone	100	Oral LD_{50} (rat) = 3.3g/kg Dermal LD_{50} (rabbit) => 8ml/kg Inhalation LC_{50} (rat) = >2,000ppm/2 hours

SECTION III HEALTH INFORMATION

Eye Contact: liquid is highly irritating to the eyes; vapors are also irritating.

Skin Contact: liquid is moderately irritating to the skin. Repeated, prolonged contact can result in defatting and drying of the skin which may lead to dermatitis.

Inhalation: breathing high vapor concentrations or prolonged breathing of lower concentrations can cause nose and throat irritation and may cause headache, dizziness and loss of consciousness.

Note: Minor embryotoxic/fetotoxic effects have been observed in laboratory rats exposed to over 1000 ppm of MEK for most of the gestation period by the inhalation route (5X the OSHA-PEL/TWA).

SECTION IV OCCUPATIONAL EXPOSURE LIMITS

ACGIH-TLV/TWA = 200 ppm
-TLV/STEL = 300 ppm
OSHA-PEL/TWA = 200 ppm

SECTION V — EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: Flush with water for 15 minutes while holding eyelids open. Get medical attention.

SKIN CONTACT: Wash with soap and water. Remove contaminated clothing and shoes; do not reuse until cleaned. If persistent irritation occurs, get medical attention.

INHALATION: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

INGESTION: Do not give liquids if victim is unconscious or very drowsy. Otherwise, give no more than 2 glasses of water and induce vomiting by giving 30cc (2 tablespoons) Syrup of Ipecac. If Ipecac is unavailable, give 2 glasses of water and induce vomiting by touching finger to back of victim's throat. Keep victim's head below hips while vomiting. Get medical attention.

SECTION VI — PHYSICAL DATA

BOILING POINT (°F) ▶ 175	MELTING POINT (°F) ▶ -125	VAPOR PRESSURE (mmHg) ▶ 75@68°F
SPECIFIC GRAVITY (H_2O=1) ▶ 0.81@60/60°F	% VOLATILE BY VOLUME ▶ 100	VAPOR DENSITY (AIR=1) ▶ 2.5
SOLUBILITY IN WATER ▶ Appreciable	EVAPORATION RATE (BUTYL ACETATE=1) ▶ 3.8	

APPEARANCE AND ODOR

Colorless, mobile liquid. Pungent odor.

SECTION VII — FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD USED	FLAMMABLE LIMITS % VOLUME IN AIR ▶ LOWER	UPPER
23°F (TCC)	1.8	11.5

EXTINGUISHING MEDIA

Use water fog, "alcohol" foam, dry chemical or CO_2.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS

Evacuate hazard area of unprotected personnel. Wear proper protective clothing including a NIOSH approved self-contained breathing apparatus. Cool fire-exposed containers with water.

UNUSUAL FIRE AND EXPLOSION HAZARDS

--

SECTION VIII REACTIVITY

STABILITY ▶ [ ] UNSTABLE [X] STABLE | HAZARDOUS POLYMERIZATION ▶ [ ] MAY OCCUR [X] WILL NOT OCC

CONDITIONS AND MATERIALS TO AVOID

Avoid heat, sparks, open flame and contact with strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide and unidentified organic compounds may be formed during combustion.

SECTION IX EMPLOYEE PROTECTION

RESPIRATORY PROTECTION

If exposure may or does exceed occupational exposure limits (Sec.IV) use a NIOSH-approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

PROTECTIVE CLOTHING

Wear impervious gloves and protective clothing as required to prevent skin contact. Wear chemical goggles to prevent eye contact.

ADDITIONAL PROTECTIVE MEASURES

Use explosion-proof ventilation as required to control vapor concentrations.

SECTION X ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES

WARNING. Flammable. Eliminate all ignition sources. Handling equipment must be grounded to prevent sparking.
Large spills: Evacuate the hazard area of unprotected personnel. Wear appropriate respirator and protective clothing. Shut off source of leak only if safe to do so. Dike and contain. If vapor cloud forms, water fog may be used to suppress; contain run-off. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material; place in non-leaking containers for proper disposal. Flush area with water to remove trace residue; dispose of flush solutions as above.
Small spills: take up with an absorbent material and place in non-leaking containers; seal tightly for proper disposal.

WASTE DISPOSAL

Place in a disposal facility approved under RCRA regulations for hazardous waste (See Sec. XIII). Use non-leaking containers, seal tightly and label properly.

ENVIRONMENTAL HAZARDS

--

SECTION XI SPECIAL PRECAUTIONS

WARNING. Flammable Liquid.
Keep away from heat, sparks and open flames. Keep containers tightly closed. Store away from strong oxidizing agents in a cool, dry place with adequate explosion-proof ventilation. Ground equipment to prevent accumulation of static charge. If pouring or transferring materials, containers must be bonded and grounded.

Do NOT weld, heat or drill on or near container; even emptied containers can contain explosive vapors.

Wash with soap and water before eating, drinking, smoking or using toilet facilities. Launder contaminated clothing before reuse.

SECTION XII TRANSPORTATION REQUIREMENTS

DEPARTMENT OF TRANSPORTATION CLASSIFICATION ▶

[X] FLAMMABLE LIQUID	[ ] COMBUSTIBLE LIQUID	[ ] OXIDIZING MATERIAL	[ ] NON-FLAMMABLE GAS
[ ] FLAMMABLE SOLID	[ ] POISON,CLASS A	[ ] CORROSIVE MATERIAL	[ ] NOT HAZARDOUS D.O.T. REGULATIO
[ ] FLAMMABLE GAS	[ ] POISON,CLASS B	[ ] IRRITATING MATERIAL	[ ] OTHER-Specify bel

D.O.T. PROPER SHIPPING NAME

Methyl Ethyl Ketone

OTHER REQUIREMENTS

D.O.T. ID.# = UN1193. Guide Sheet 26.

SECTION XIII OTHER REGULATORY CONTROLS

EPA,FDA,OSHA,USDA,CPSC,etc.

EPA - Resource Conservation and Recovery Act (RCRA) Regulations
This product has been designated by the EPA (RCRA 40 CFR 261.33) as a hazardous waste if it is spilled, discarded or intended to be discarded as is. The EPA hazardous waste number for methyl ethyl ketone is U159.

Come to Shell for answers

Manager
SHELL OIL COMPANY
PRODUCT SAFETY AND COMPLIAN
OIL AND CHEMICAL PRODUCTS
P.O. BOX 4320
HOUSTON,TEXAS 77210

DATE PREPARED

March 16, 1982

Van Waters & Rogers Inc.

Procedures, Structures, Equipment

(40 CFR Sec. 122.25(a)(8))

The hazardous waste management activities undertaken at this facility of VW&R is that only of temporary storage of drummed solvents which are defined as hazardous wastes. There is but one location at the facility which is utilized for loading and unloading of materials received from off-site generators. The loading/unloading area is designated on the facility diagram.

This facility receives less than truckload quantities of waste materials from off-site generators and temporarily stores them in order to accumulate economical truckloads of these materials to warrant the distances involved in reaching the recycling centers to which these waste materials are ultimately destined.

The amount of handling of the drummed materials while at the facility is kept to an absolute minimum to minimize the likelihood of damage and possible release. Once trucks carrying waste materials are at the dock area and secured by means of wheel chocks, forklifts are utilzed to transfer the drums from the truck onto wooden pallets in the staging area at the loading and unloading area. Drums are placed four to a pallet, and once the necessary administrative procedures and verification counts have been made as outlined under "Containment Management Practices", full pallets are carried by forklift to the designated storage area where they remain on the pallet. While in storage, the drums are inspected in accordance with the inspection schedule listed in Table 1. Sufficient spacing around each pallet of drums is maintained to ensure the avoidance of damaging drums while placing pallets adjacent to another.

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Once an economic truckload quantity of material is accumulated, the full pallets of drums are brought to the staging area at the dock, prepared for shipment, and placed onto the vehicle transporting them to the recycling center. Because of the minimal handling during the materials presence at the facility site, the likelihood of spills is minimal, but should an incident occur, spilled material would be contained and picked up by use of Hazorb or other industrial absorbents which are readily available at the site. Any contaminated material shall be picked up and placed in an open-head drum compatible with the material, and sent to a properly permitted disposal facility.

As will be outlined in the section "Secondary Containment System Design and Operation", any water runoff from the designated waste storage area will be caught in the containment area by the berm. Upon examination of the collected water, with no evidence of contaminants, the water can be released and ultimately feeds into the municipal storm sewer system. Should evidence of a spill be present in the berm area, an analysis of the effluent will be conducted if it is not evident as to the source and nature of the contaminant. Once the contaminant is identified, all effluent in the berm area shall be drummed by means of a portable pump, and held until arrangements can be made for its proper disposition to an appropriately registered and equipped disposal site. All other run-off from the property flows to the municipal storm sewer system.

Ground water contamination is prevented at this facility by assuring that all containers of waste materials are stored in a closed, good quality drum, and remain at all times in the designated hazardous waste storage area which

has the secondary containment system protection described in detail in the section entitled "Secondary Containment System Design and Operation". The design, operation, inspection, and construction of this area is such, as to minimize the threat of possible ground water contamination.

Because of the absence of process operations at this facility in which an equipment or power failure could cause a threat to human health or the environment, the impact of such an occurrence would be negligible. However, in the event that loading or unloading activities might be under way during a power failure, and the available light were of an insufficient nature to safely complete the task, operations shall be ceased until the power company is notified and the cause of the failure discovered and repaired. Any problems which might be isolated to a specific area of the facility or a particular machine shall be brought to the manager's attention for corrective actions with support from Regional Operations if required.

VW&R facilities maintain on-site Material Safety Data Sheets for the products which they distribute. Copies of the appropriate Material Safety Data Sheets for specific chemical materials handled in waste form follows the "Contingency Plan" section. These data sheets are kept on file and are updated routinely so that facility personnel have accurate information available regarding toxicity, fire and explosion hazards, protective equipment recommendations, and first aid. Available protective and emergency equipment which is kept at the facility is presented in the section entitled "Contingency Plan". Use of personal protective equipment is strictly enforced and is covered in the employees initital training, as well as being reinforced on a routine basis in monthly safety meetings which

are conducted by the facility management.

Van Waters & Rogers Inc.

Prevention of Reaction of Ignitable, Reactive, or Incompatible Wastes

(40 CFR Sec. 122.25(a)(9), 122.25(b)(1), 122.25(b)(2), 122.25(b)(4))

A VW&R storage facility handles materials in waste form from off-site generators who wish to employ the Company's recycling capabilities. This site functions as a temporary storage and transfer point for accumulating economic truckloads to make it economically feasible to reship these materials the distance involved in getting to the recycling centers.

Some of the materials handled in waste form at this facility are expected to fall into the category of an ignitable. This facility will not handle any materials which would be classified as a reactive waste and for which special precautions would be required. All waste materials are stored in the designated waste storage area indicated on the facility diagram.

All containers (drums) utilized for shipments of waste materials are of proper specifications as outlined in the section entitled "Containers Utilized Holding Free Liquids", to contain, store, and transport the materials handled. All containers of waste material are tightly closed while in storage. The waste storage area is isolated from vehicle traffic pattern, and the activities conducted in the yard area are limited. It is VW&R 's policy that no smoking is allowed in any areas of the facility other than office and breakroom areas. "No Smoking" and "Danger-Unauthorized Personnel Keep Out" signs are prominently posted. Personnel are instructed and familar with the required precautions which must be exercised when working around ignitable materials such as the use of spark proof tools, elimination of possible ignition sources, etc.

Revised
DEC 2

In the event that a leaking container is discovered and requires transfer while in storage at this site, only clean, new or reconditioned containers of the proper specification for the material will be utilized.

Containers of ignitable wastes while present at this facility are handled with the respect they deserve in order to minimize the possibility for fire or explosion. All containers must be kept tightly sealed and be in good condition (including proper labelling and marking) prior to our drivers' accepting them at the generator's facility. Drums are placed on wooden pallets and remain on these pallets while in storage to reduce handling. Pallets of waste materials while in storage in the designated hazardous waste storage area are typically stacked two, but in no case more than three high. Space is maintained around stacks of pallets to facilitate inspection of the drums. Stacks will be maintained in a neat manner with no overhang or leaning. Only good quality wooden pallets shall be used. The designated hazardous waste storage area is more than 50 feet from the facility property lines as required.

Containers of waste materials destined for recycling which are received at this facility are already sealed by the generator and shall remain sealed unless a leaking container were discovered, in which case it is transferred to a different container - a clean drum meeting the proper specification for the material involved. Customers (generators) who employ our services are encouraged to use the same container for the waste material which originally held the virgin product, unless another commodity which is not compatible with that container has been introduced into the waste stream. This minimizes the likelihood of container incompatibility with the material, as well as the solvents'

(residue vs. waste) possibly being incompatible and causing a reaction or the loss of the reclaim value of the material. Materials typically handled by this facility for recycling are compatible with each other in that when combined they do not cause a reaction. Attention is given to having customers avoid these practices because of the potential problems which could result, and the rendering of the materials as of no value because of the inability to recycle the material.

This facility does not utilize tanks for the management of waste materials of any kind so the regulations pertaining to the management of ignitable, reactive, or incompatible wastes in such vessels is not applicable.

This facility does not utilize waste piles for the management of waste materials of any kind so the regulations pertaining to the management of ignitable, reactive, or incompatible wastes by this means is not applicable.

Van Waters & Rogers Inc.

Traffic Patterns

(40 CFR Sec. 122.25(a)(10))

The VW&R branch in Bedford Heights has the following trucking fleet:

Four - 3-axle tandem tractors
One - 2-axle tandem tractor
Two - 32 foot van trailers
Five - 40 foot van trailers
One - Straight truck

These units are registered with the Public Utilities Commission of Ohio and are permitted to transport hazardous waste. The maximum gross vehicle weight of the largest tractor/trailer combination at this facility is 73,000 pounds (loaded).

All roads travelled are of either bituminous or concrete construction with load-bearing capacity to withstand even the largest vehicle assigned to this facility. All traffic areas within the facility's boundaries are concrete.

Once a truck has entered the facility and backed into the loading dock, the branch personnel will utilize our LPG fueled forklift with a 4,000 pound capacity to remove drums of spent solvent from the van trailer; if they do not arrive on pallets, they will be palletized immediately - four drums to a pallet.

There will be no discernable increase in traffic to or from the branch because of the branch's hazardous waste handling, since essentially all pickups of spent solvents will be made by trucks already on the customer's premises by virtue of a delivery.

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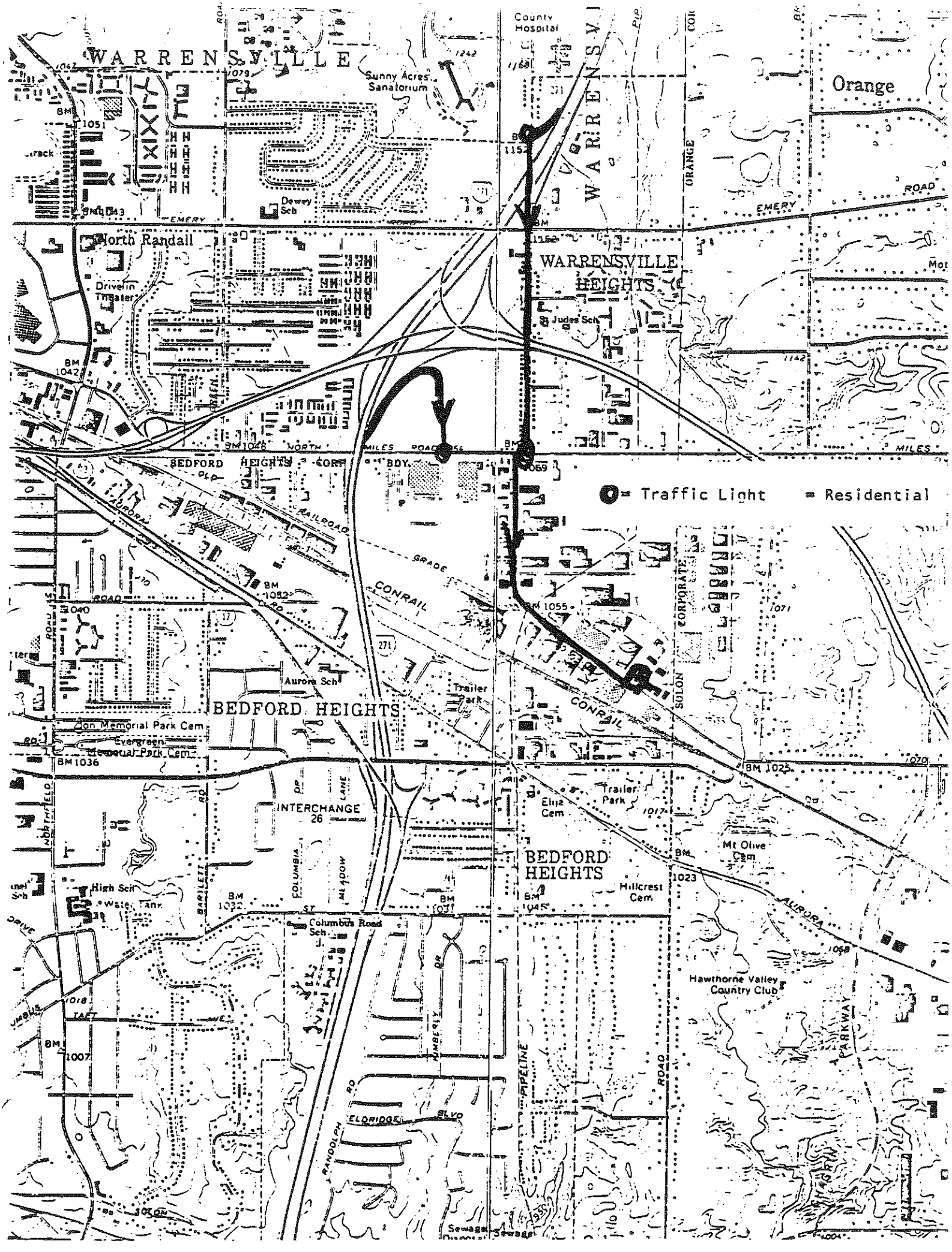
The Interstate Highway nearest the VW&R facility is I-271. VW&R trucks returning Northbound turn off at Miles Road and head East on Miles for about a quarter of a mile to the intersection with Richmond Road. The branch is located about 3/4 mile South on Richmond. This route is essentially all industrial.

Southbound truck traffic turns off Interstate I-28; at Richmond Emery Road, and then follows Richmond directly to the branch. Some of this route is residential, and is highlighted in yellow on the following map.

These routes and the traffic control devices encountered are delineated in the following map.

It should be kept in mind that pickups and deliveries of spent solvents will be relatively infrequent, that often the 55-gallon drums will constitute only part of the load, and that the hazardous waste solvents involved were all transported along these routes and in this equipment in the first place.

The concrete area within the yard is 8 inches thick with 6 inch by 6 inch mesh of No. 6 reinforcing rod. The specified load-bearing capacity is 3,000 lbs/sq. in.


WARRENSVILLE
Sunny Acres Sanatorium
County Hospital
Orange
Dewey Sch
North Randall
Drive-In Theater
WARRENSVILLE HEIGHTS
Judes Sch
BEDFORD HEIGHTS
= Traffic Light
= Residential
AURORA
RAILROAD
CONRAIL
Aurora Sch
Trailer Park
BEDFORD HEIGHTS
Zion Memorial Park Cem
Evergreen Memorial Park Cem
INTERCHANGE 26
High Sch
Water Tank
Columbus Road Sch
Eliz Cem
Trailer Park
Mt Olive Cem
Hillcrest Cem
BEDFORD HEIGHTS
Hawthorne Valley Country Club
SOLON
Sewage
Sewage

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Facility Location Information

(40 CFR Sec. 122.25(a)(ii,v); Part 264 Appendix VI)

Floodplain - The floodplain map for this area, supplied by the United States Department of Housing and Urban Development, Federal Insurance Administration, indicates this location not to be affected; the appropriate section of the relevant map follows.

Seismic Considerations - Potential seismic activity is not a factor at this location.

Wind Rose - A statistical analysis of wind direction at Cleveland (Percent Frequency by Direction) was furnished by the Ohio EPA. A copy follows.

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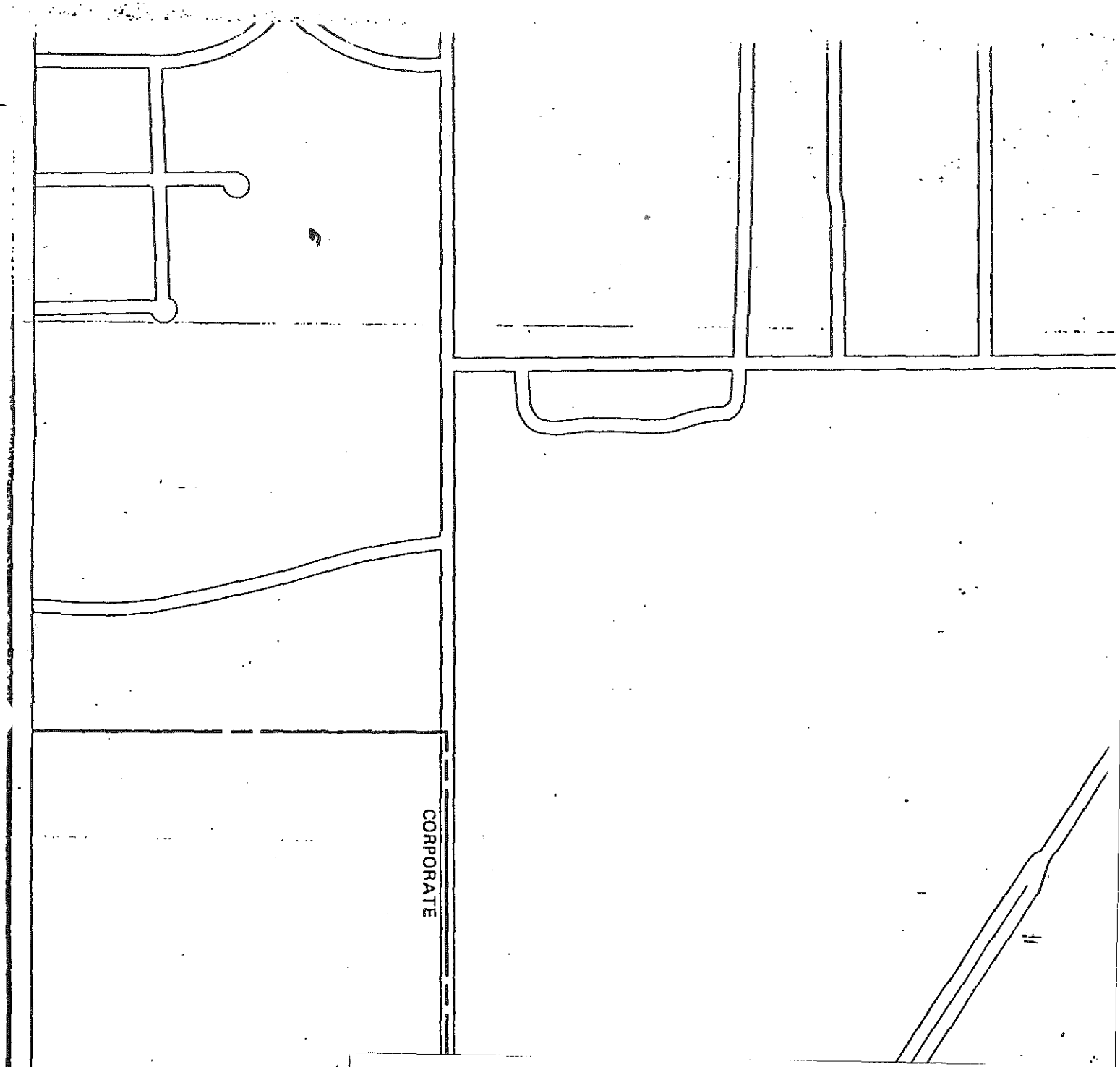

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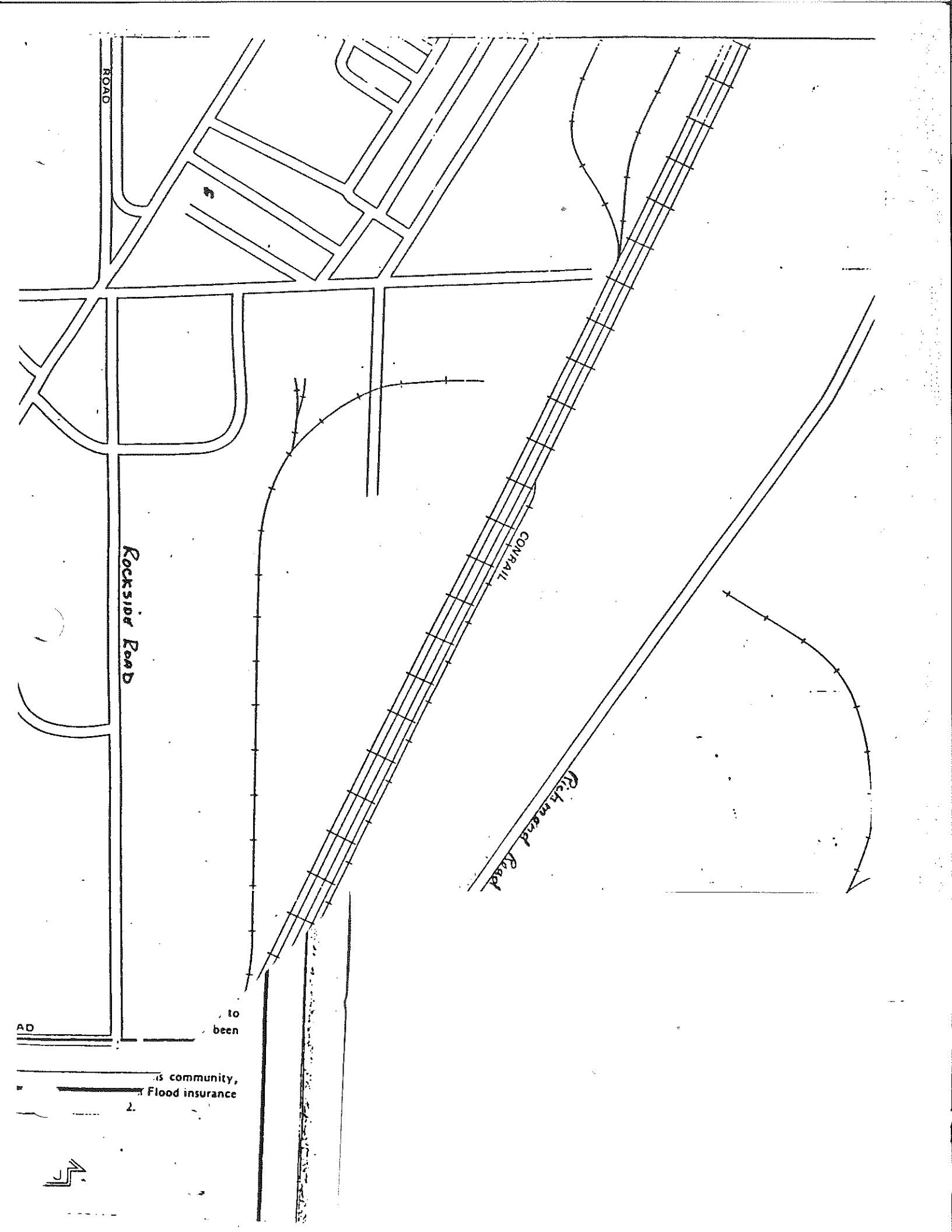

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PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Part 52 of Title 40, Code of Federal Regulations is amended as follows:

Subpart VV—Virginia

1. In § 52.2439, *Identification of plan*, paragraph (c)(47) is added as follows:

§ 52.2439 Identification of plan.

* * * * *

(c) * * *

(47) Amendments to Chapter 1 of all nonattainment plans; amendments to Chapter 11 of the Richmond, Northern Virginia, Peninsula and Southeastern plans; amendments to Chapter 9 of the Roanoke and Stafford plans; addition of Appendices A and B to all plans; amendments to Chapter 3 of the Northern Virginia, Peninsula, Southeastern, Roanoke and Stafford plans; amendments to Chapter 10 of the Richmond, Peninsula and Southeastern plans; addition of Appendix C to the Northern Virginia Plan; and, certain revisions to Chapter 5 of all plans were submitted by the Secretary of Commerce and Resources on April 13, 1981. Revision of Chapter 10 of the Northern Virginia plan submitted on July 23, 1981.

§ 52.2431 [Amended]

2. In § 52.2431, Control Strategy: Carbon monoxide and ozone, remove paragraph (e).

[FR Doc. 81-33888 Filed 11-20-81; 8:45 am]

BILLING CODE 6560-01-M

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40 CFR Part 264

[SWH-FRL 1903-1]

Standards Applicable to Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities

AGENCY: Environmental Protection Agency (EPA).

ACTION: Interim rule.

SUMMARY: EPA is today revising Appendix VI to 40 CFR Part 264. Appendix VI lists political jurisdictions within which the probability of Holocene fault displacement and deformation warrants a geologic investigation in order to demonstrate compliance with the seismic location standard for hazardous waste management facilities in § 264.18(a). Facilities not located in these areas are presumed to be in compliance with the standard. This amendment deletes from Appendix VI those areas where the risk of facility damage due to fault displacement and deformation does not warrant a geological investigation. This amendment is the result of EPA's review of public comments and new information received after January 12, 1981.

DATES: This interim final amendment is effective on November 23, 1981. Comments are due on or before December 23, 1981.

ADDRESSES: Comments should be addressed to Deneen Shrader, Docket Clerk, Office of Solid Waste (WH-562), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460. Commenters should identify this rulemaking as follows: "Docket No. 3004, Appendix VI to Part 264". The public docket for this regulation is located in Room 2711, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C., and is available for viewing from 8:30 a.m. to 4:00 p.m., Monday through Friday, excluding holidays.

FOR FURTHER INFORMATION CONTACT: Cindy Hoppmann, Office of Solid Waste (WH-565), U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460, (202) 755-9201.

SUPPLEMENTARY INFORMATION:

I. Authority

This amendment is issued under the authority of Sections 2002(a) and 3004 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended. 42 U.S.C. 6912(a) and 6924.

II. Background of and Basis for Amendment

On January 12, 1981 (46 FR 2802), EPA promulgated permitting standards for new and existing hazardous waste management facilities. Section 264.18(a) of these standards prohibits the issuance of a permit to a new facility which is located within 200 feet of a fault which has had displacement in Holocene time. Compliance with this standard must be demonstrated by a geologic investigation. *See* § 122.25(a)(11).

The January 12 standards do not require a geologic investigation in all areas, however. As noted in the preamble to the standards, not all areas of the United States are affected by Holocene faulting (46 FR 2810–2813). EPA concluded that requiring a geological investigation in areas known not to have Holocene faults would impose an unnecessary regulatory burden and cost on a hazardous waste management facility. Thus, a geological investigation is required only for those areas which have some historical evidence of faulting or potential for such faulting. These areas are listed in Appendix VI to Part 264.[1] EPA based its selection of those areas on two maps: The "Map for Coefficient Aa" (coefficient Aa is a measure of ground motion) by the Applied Technology Council (1978), and the "Preliminary Map of Young Faults in the United States as a Guide to Possible Fault Activity" by Howard and others of the United States Geological Survey (1978) (hereinafter "USGS Map").

EPA also stated in the January 12 preamble that Holocene deposits and landforms (e.g., fault scarps, offset streams) are either nonexistent or incomplete in some areas of the United States. In such areas, an inspection of the geologic strata does not yield enough evidence to conclusively determine when the most recent displacement occurred (see 46 FR 2812). An example was given of areas where glacial activity stripped the surficial ground cover and left highly resistant rock. It was stated that in situations of this sort, indirect methods such as a review of records of the location of epicenters of historic earthquakes, and an examination of possible fault-related features expressed in Pleistocene and older deposits would have to be conducted to determine if Holocene faults are present within 200 feet of the facility.

Since this standard was promulgated, EPA has learned that there are no faults east of the front range of the Rocky Mountains which have been conclusively identified as having had displacement during Holocene time. Geologists at the U.S. Geological Survey working on updated versions of the USGS Map confirm this finding.

Moreover, information obtained from the U.S. Geological Survey suggests important differences in the geology of the areas east and west of the eastern front of the Rocky Mountains. In the Eastern United States, there is a general lack of usable stratigraphic horizons upon which to base age dates of faulting. In addition, faults in the East do not break the surface as frequently as they do in the West. In the relatively few instances where faults are visable at the surface in the East, the exposed deposits are usually either older than Holocene age or they cannot be precisely dated. Under these geologic conditions, geologists cannot determine with certainty whether a fault has had displacement in Holocene time. The

[1] Facilities located in areas not listed in Appendix VI are presumed to be in compliance with the standard.

geologist can state with certainty only that the fault moved after the uppermost deposits that are displaced were laid down.

More importantly, in the Eastern United States the risk of any fault displacing and deforming the earth's surface is very low (e.g., the risk is two to three orders of magnitude lower than the risk of a 100-year flood). Even the largest historical shocks (e.g., New Madrid, Missouri and Charleston, South Carolina) have not broken the ground to form the obvious fault traces typical of West Coast faulting. Therefore, the probability is very low that displacement and deformation along Holocene faults, the very processes that the seismic standard was intended to protect against, would occur in the near future in the East.

Furthermore, it is dubious whether or not an investigation conducted in the East would turn up useful information about Holecene faulting. EPA stated in the January 12 preamble that where Holocene deposits are scarce, indirect methods can be used to determine if Holocene faults are present within 200 feet of the facility. EPA now realizes that it is doubtful whether these indirect methods would indicate the presence of a fault, much less a Holocene fault, in the East. This is because, whereas some areas in the East have experienced repeated earthquakes, a surface fault has not been identified as being associated with the earthquakes even after extensive study.

EPA received comments on the interim final seismic standard which argued that we should not require a potentially costly demonstration where no documented evidence of Holocene fault displacement exists. Some commenters suggested that where the USGS Map does not indicate the existence of Holocene faults, the seismic standard should not apply.

EPA agrees that a potentially costly demonstration should not be required where available evidence indicates that the presence of Holocene faults is unlikely. Furthermore, EPA believes that the USGS Map should only be used as a definitive guide insofar as it represents the best and most recent geological information available. Because no Holocene faults have been identified east of the front range of the Rocky Mountains, and because the risk of fault displacement and deformation is low in the East, EPA has decided to limit the requirement for a geological investigation to political jurisdictions which are west of the front range of the Rocky Mountains. Accordingly, Appendix VI to Part 264 is today being revised so that only owners and operators of facilities which are located in the following states (or identified portions thereof) will be required to conduct a geologic investigation: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Utah, Washington, and Wyoming. The seismic standard in § 264.18(a) and the information requirements for permit applications in § 122.25(a)(11) remain unchanged.

Although EPA does not believe that fault displacement and deformation represent a significant risk for location of hazardous waste facilities east of the front range of the Rocky Mountains, the Agency continues to be concerned about possible damage to facilities due to ground motion and ground failure in these areas. EPA is continuing to consider the need for a location standard which addresses ground motion and ground failure (see 46 FR 2811 for discussion).

III. Economic and Regulatory Impact

EPA has determined, pursuant to Executive Order 12291, that the amendment promulgated here today does not constitute a major rule and therefore, that no Regulatory Impact Analysis is required. This amendment results in a net reduction in regulatory burden and compliance costs for the regulated community. Geological investigations will no longer be required for hazardous waste management facilities located in those portions of the United States, east of the front range of the Rocky Mountains, which were listed in the original Appendix VI.

In compliance with Executive Order 12291, EPA submitted this notice to the Office of Management and Budget (OMB) for review.

The Regulatory Flexibility Act requires all Federal agencies to consider the effects of their regulations on small entities (i.e., small businesses, small organizations and small governmental jurisdictions). As this amendment reduces the net regulatory burden on new hazardous waste management facilities, regardless of their size, it will not have a significant economic impact on a substantial number of small entities. Therefore, a regulatory flexibility analysis is not necessary.

IV. Effective Date

Section 3010(b) or RCRA provides that EPA's hazardous waste regulations and revisions thereto take effect six months after their promulgation. The purpose of this statutory requirement is to allow persons affected by the regulations sufficient lead time to prepare to comply with major new regulatory requirements. Because this amendment eliminates an existing regulatory requirement for some facilities, EPA believes that a six-month effective date is not needed to serve the purpose of Section 3010(b). Moreover, the Agency believes that an effective date six months after promulgation would defeat the purpose of this amendment. EPA is therefore making this amendment effective on November 23, 1981.

Dated: November 17, 1981.

Anne M. Gorsuch,

Administrator.

PART 264—STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

For the reasons set forth in the preamble, Appendix VI to Part 264 of Title 40 of the Code of Federal Regulations is revised to read as follows:

Appendix VI to Part 264—Political Jurisdictions[1] in Which Compliance With § 264.18(a) Must Be Demonstrated

Alaska

Aleutian Islands	Kodiak
Anchorage	Lynn Canal-Icy Straits
Bethel	Palmer-Wasilla-Talkeena
Bristol Bay	Seward
Cordova-Valdez	Sitka
Fairbanks-Port Yukon	Wade Hampton
Juneau	Wrangell Petersburg
Kenai-Cook Inlet	Yukon-Kuskokwim
Ketchikan-Prince of Wales	

Arizona

Cochise	Greenlee
Graham	Yuma

California

All

Colorado

Archuleta	Mineral
Conejos	Rio Grande
Hinsdale	Saguache

Hawaii

Hawaii

Idaho

Bannock	Franklin
Bear Lake	Fremont
Bingham	Jefferson
Bonneville	Madison
Caribou	Oneida
Cassia	Power
Clark	Teton

Montana

Beaverhead	Cascade
Broadwater	Deer Lodge

[1] These include counties, city-county consolidations, and independent cities. In the case of Alaska, the political jurisdictions are election districts, and, in the case of Hawaii, the political jurisdiction listed is the island of Hawaii.

Flathead	Park
Gallatin	Powell
Granite	Sanders
Jefferson	Silver Bow
Lake	Stillwater
Lewis and Clark	Sweet Grass
Madison	Teton
Meagher	Wheatland
Missoula	

Nevada

All

New Mexico

Bernalillo	Santa Fe
Catron	Sierra
Grant	Socorro
Hidalgo	Taos
Los Alamos	Torrance
Rio Arriba	Valencia
Sandoval	

Utah

Beaver	Piute
Box Elder	Rich
Cache	Salt Lake
Carbon	Sanpete
Davis	Sevier
Duchesne	Summit
Emery	Tooele
Garfield	Utah
Iron	Wasatch
Juab	Washington
Millard	Wayne
Morgan	Weber

Washington

Chelan	Mason
Clallam	Okanogan
Clark	Pacific
Cowlitz	Pierce
Douglas	San Juan Islands
Ferry	Skagit
Grant	Skamania
Gray Harbor	Snohomish
Jefferson	Thurston
King	Wahkiakum
Kitsap	Whatcom
Kittitas	Yakima
Lewis	

Wyoming

Fremont	Teton
Lincoln	Uinta
Park	Yellowstone National Park
Sublette	

[FR Doc. 81-33728 Filed 11-20-81; 8:45 am]

BILLING CODE 6560-20-M

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40 CFR Part 429

[WH-FRL 1936-2]

Timber Products Processing Point Source Category Effluent Limitations Guidelines, New Source Performance Standards and Pretreatment Standards

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Rule; Technical Amendment and Correction.

SUMMARY: On January 28, 1981, EPA promulgated effluent guidelines and standards under the Clean Water Act for pollution discharges from the timber products industry. Shortly afterwards, the American Hardboard Association (AHA) expressed concerns about the new source performance standard promulgated for the wet process hardboard subcategory. AHA also brought to EPA's attention an error in the definition of process wastewater for the dry process hardboard, veneer, finishing, particleboard, and sawmills and planing mills subcategories.

In response to AHA's concerns, EPA is today limiting the applicability of the new source performance standards for the wet process hardboard subcategory. It is also correcting the inadvertent error in the definition of process wastewater for the dry process hardboard and other subcategories.

EFFECTIVE DATE: These amendments will become effective December 23, 1981. In accordance with 40 CFR 100.01 (45 FR 26048), these amendments shall be considered issued for purpose of judicial review at 1:00 p.m. Eastern time on December 7, 1981.

ADDRESS: The record for this rulemaking is available for public inspection and copying at EPA's Public Information Reference Unit, Room 2404 (Rear) PM-213 (EPA Library), 401 M St., S.W., Washington, D.C. 20460. The EPA information regulation (40 CFR Part 2) provides that a reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Richard E. Williams, Environmental Protection Agency, Effluent Guidelines Division (WH-552), 401 M St., S.W., Washington, D.C. 20460, (202) 426-2554.

SUPPLEMENTARY INFORMATION:

I. New Source Performance Standards—Wet Process Hardboard Subcategory

On January 28, 1981, EPA promulgated effluent guidelines and standards for various subcategories in the timber products industry. These standards included a new source performance standard for the wet process hardboard subcategory, which required new sources to achieve no discharge of process wastewater pollutants (see 40 CFR 429.64, 46 FR 8290). Shortly after promulgation, the AHA requested EPA to rescind the wet process hardboard new source performance standard. AHA based its request on concerns about the Agency's proposed criteria for identifying "new sources." These criteria define "new source" to include not only sources which are constructed where no other industrial sources presently exist (i.e., "greenfield" sites) but also sources which are constructed at the site of an existing source and either totally replace the processes causing the discharge at the existing source or are substantially independent of the processes causing the discharge at the existing source (see 45 FR 59343-59344, September 9, 1980). AHA pointed out that, in promulgating the new source performance standard for the wet process hardboard subcategory, EPA only evaluated the impact of this no discharge requirement on new sources constructed at "greenfield" sites—not on new sources created by the modification of existing sources. AHA suggested that, without undertaking further analysis, it was improper for EPA to require new sources other than "greenfield" facilities to meet the no discharge limitation.

EPA agrees that AHA's concerns have merit. Achievement of the no discharge new source performance standard for the wet process hardboard subcategory depends, to a large extent, on the application of spray irrigation—a particularly land—intensive treatment technology. It was appropriate for EPA to assume that "greenfield"-type new sources have the flexibility to obtain the land required for spray irrigation. Without engaging in further analysis, however, it was inappropriate for EPA to assume that non-"greenfield" new sources would always have the ability to obtain the land required for spray irrigation. Consequently, EPA is amending the new source performance standard for the wet process hardboard subcategory to make it applicable only to "greenfield" facilities. As a result of this amendment, substantial modifications of existing sources, which might possibly qualify as new sources under the previous definition, will only be required to comply with the limitations applicable to existing sources. This change will be restricted to the wet process hardboard subcategory and will not affect the Agency's general definition of "new source" or the criteria for identifying the sources which fit within this definition. That definition and the accompanying criteria, once finalized, will be generally applicable to all other industrial subcategories.

II. Process Wastewater Definition—Dry Process Hardboard, Veneer, Finishing, Particleboard, and Sawmills and Planing Mills Subcategories

In its January 28, 1981 promulgation of effluent guidelines and standards for the timber industry, EPA included, for the sake of completeness, a number of timber effluent guidelines and standards which had been previously promulgated in 1974-1978 and were not substantively amended by the 1981 promulgation. Among these were the effluent guidelines and standards for the dry process hardboard, veneer, finishing,

PERCENT FREQUENCY BY DIRECTION

Direction/Site	Columbus	Cleveland	Mansfield	Dayton	Toledo	Youngstown
N	9.3	8.7	6.3	5.8	5.6	6.4
NNE	3.8	4.8	4.5	3.4	2.7	3.0
NE	4.3	3.8	3.2	3.3	4.2	3.4
ENE	3.5	1.9	2.1	3.2	5.7	2.7
E	6.7	2.3	3.4	5.3	6.2	5.1
ESE	6.1	2.3	2.7	4.8	3.4	5.0
SE	7.0	3.4	3.7	5.7	3.4	7.6
SSE	6.2	5.8	6.7	4.5	3.7	4.4
S	12.9	16.5	12.9	12.5	10.3	10.6
SSW	6.7	11.6	11.6	9.3	7.2	6.1
SW	5.4	11.1	9.2	7.4	9.6	9.5
WSW	4.9	8.2	8.7	7.2	11.4	9.0
W	8.5	5.4	10.9	10.7	10.4	10.7
WNW	4.6	4.7	5.4	6.0	6.8	5.4
NW	4.4	4.6	4.3	4.7	4.4	6.0
NNW	4.8	4.1	3.6	4.4	4.1	4.3

Based on STARDATA, 1970-1974 except Parkersburg, which was based on L.C.D., 1979-198

WIND ROSE
CLEVELAND, OHIO